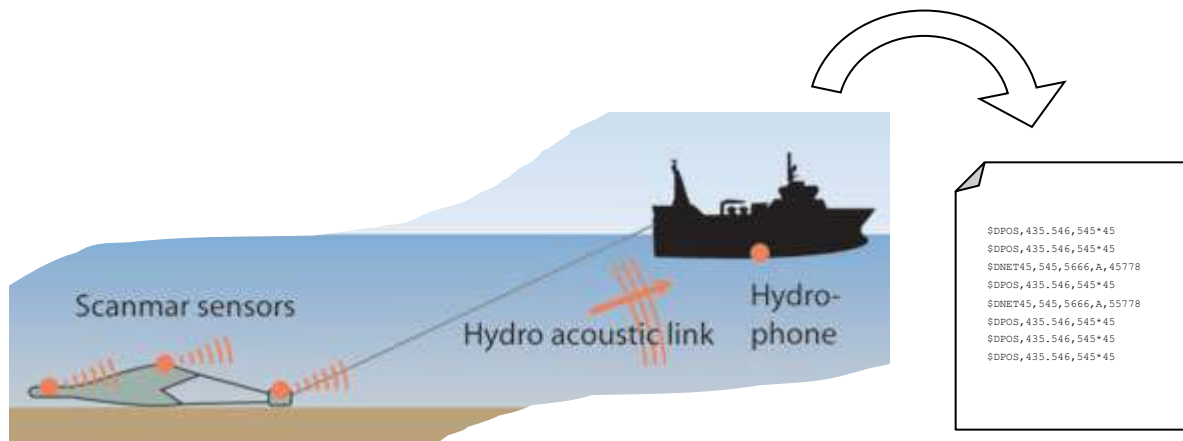


How to record Scanmar data on board RV „Heincke“

How data from the net monitoring system Scanmar can be acquired and recorded

31.05.2013



1 Introduction

The Scanmar net monitoring system on board RV „Heincke“ is used to monitor opening widths, positions and depths of a fishing net. For later analysis and research it is important to continuously record these data during a trawl. From now on this is possible on board RV „Heincke“ via the ship-wide intranet. What the data look like and how to achieve and convert them is described in the following chapters.

2 Scanmar settings

The Scanmar data is made available via a terminal server. To access the data use any TCP/IP client program e. g. PuTTY or Hyperterminal.

Terminal server IP address: *192.168.150.21*

Terminal server TCP Port for Scanmar data: *4010*

Scanmar NMEA output configuration:

<i>Extrapolation</i>	<i>OFF</i>
<i>Filtering</i>	<i>ON</i>
<i>Baud rate</i>	<i>19200</i>



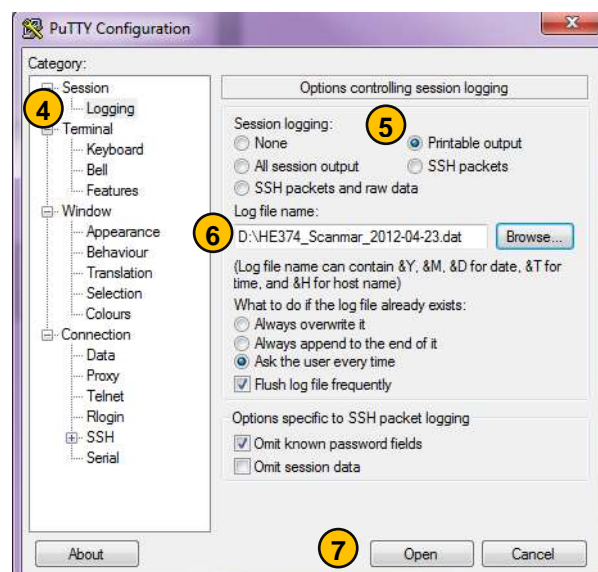
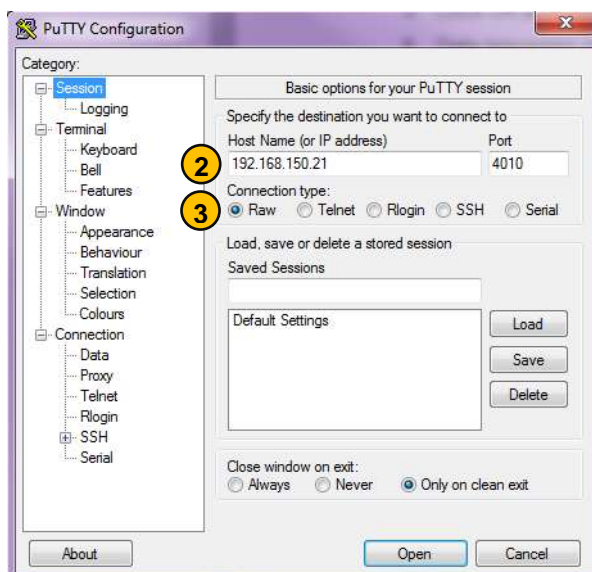
3 Record data using PuTTY

PuTTY (if not digitally attached to this document) is available for download at:

<http://www.chiark.greenend.org.uk/~sgtatham/putty/>

For use in Windows 2000/XP/Vista/7/8.


1. Open PuTTY
2. As *host address* enter the IP address 192.168.150.21 and as *port* 4010
3. Choose *Connection type* [x] Raw
4. To record data select the category *Logging* on the left.
5. Set *Session logging* to [x] Printable output
6. Set a *Log file name*
7. Click *Open* to open the connection and store Scanmar NMEA data. Please make sure in the Windows Explorer that the file has been created and grows continuously.

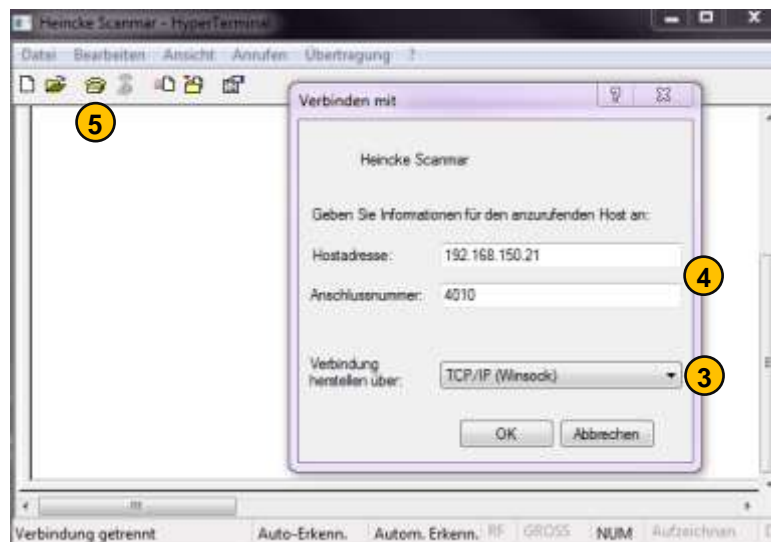




4 Record data using Hyperterminal

Hyperterminal is pre-installed on Windows 2000/XP. For Windows Vista/7/8 download the Hyperterminal Private Edition in the internet.

1. Open Hyperterminal
2. Select menu *File / New Connection*
3. As *Connect using* choose TCP/IP (Winsock)
4. As *host address* enter the IP address 192.168.150.21 and as *port* 4010
5. Click *OK* and afterwards *Connect/dial* 
6. Data telegrams in NMEA format should appear on the screen



7. To record data choose menu *Transfer / Capture Text*
8. Choose a folder and a file to save the data to, press *Start*
9. All received Scanmar NMEA telegrams will now automatically be stored to the given file. Please make sure in the Windows Explorer that the file has been created and grows continuously.



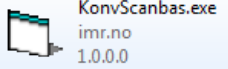


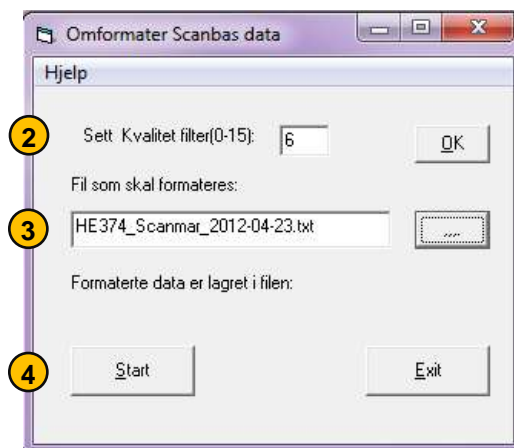
5 Convert recorded data to table / Excel

The data recorded from Scanmar is in NMEA format and looks like this:

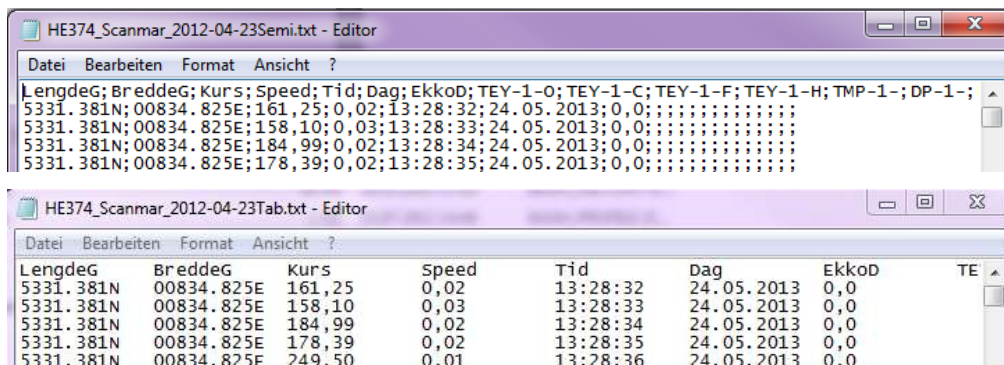
```
$PSCMGLL,5331.381,N,00834.825,E,124820.00,A,A*70
$PSCMVTG,161.25,T,0.00,M,0.02,N,0.04,K,A*3e
$PSCMZDA,132832.00,24,05,2013,00,00*76
$PSCMDBS,,f,,M,,F*35
$PSCMSM2,132832.00,V,TEY,1,O,,0*7a
$PSCMSM2,132832.00,V,TEY,1,C,,0*76
$PSCMSM2,132832.00,V,TMP,1,,,0*34
```

To convert that data to a table you can use the digitally attached program KonvScanbas.exe.

1. Start KonvScanbas.exe 
2. Choose a quality filter setting (*Sett Kvalitet filter*) and press *Ok*; recommendation is 6
3. Choose the file to convert which must contain NMEA data (*Fil som skal formateres*)
4. Press *Start*



5. The results are two files which are created in the same folder, the original file is located in. They have the name *<original-file>Semi.txt* and *<original-file>Tab.txt*. One contains a semicolon-separated and one contains a tab-separated data table.



6. To import the data to Excel open Excel and choose menu *File / Open File*. Set the file type filter to *Text files (*.txt, *.csv)* and select the converted *<original-file>Semi.txt*.