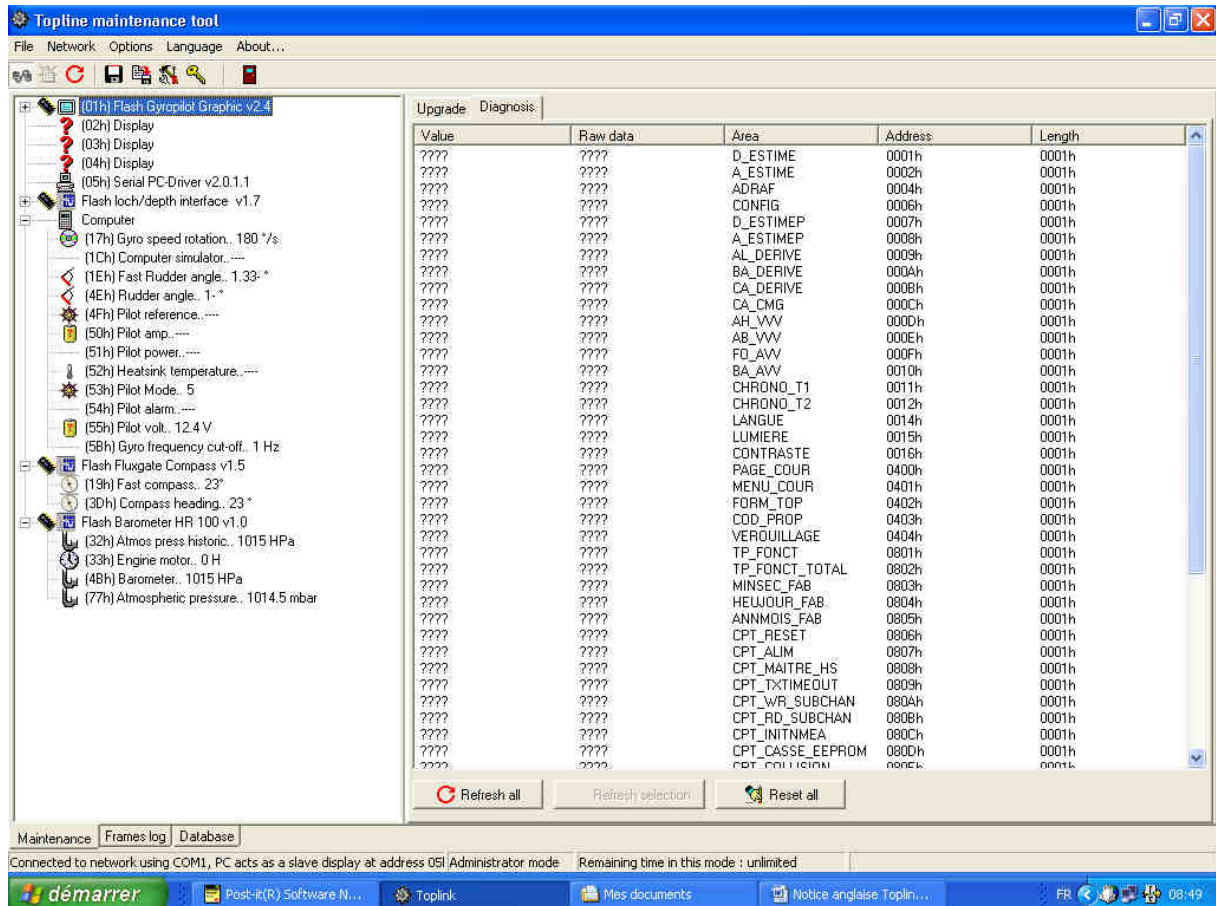


TOPLINK 2 Software



USER GUIDE

nke – Sailing competition
 Z.I. Kerandré – Rue Gutenberg – 56700 HENNEBONT- FRANCE
<http://www.nke.fr> – After sale service n° 33 297 365 685

Table of content

Table of content	1
1. <u>Presentation</u>	2
2. <u>Installation</u>	2
3. <u>First utilisation</u>	2
4. <u>Analysis of the different functioning modes</u>	5
5. <u>Software update of a Topline equipment</u>	6
6. <u>Help to diagnosis</u>	8
6.1 Soft spies recording	8
6.2 How to record a file	10
7. <u>Recording the Topline bus</u>	11
8. <u>Settings</u>	12

1. Presentation

The TOPLINK software is a maintenance software for a computer working with Windows 95,98, Millenium, NT 4.0 or XP.

It allows you :

- to up-date the firmwares,
- to read of the *soft spies* embedded in Topline equipments,
- to record the Topline bus datas for analysis.

It is restrained in order to allow the access to its differerent functions according to an autorisation level.

Three levels are provided : **Standard** (the most restrained) – **Expert** – **Administrator** (the most complete).

Activation keys supplied by NKE allow the access to the different modes.

The computer must be connected to the Topline bus with the Prodata Interface cable (ref. 90-60-466) via a COM port (USB or PCI serial port are not compatible with the Topline driver).

Some kinds of PCMCIA RS232 cards are compatible with the Topline drivers. We have selected a compatible PCMCIA card which is available in NKE office.

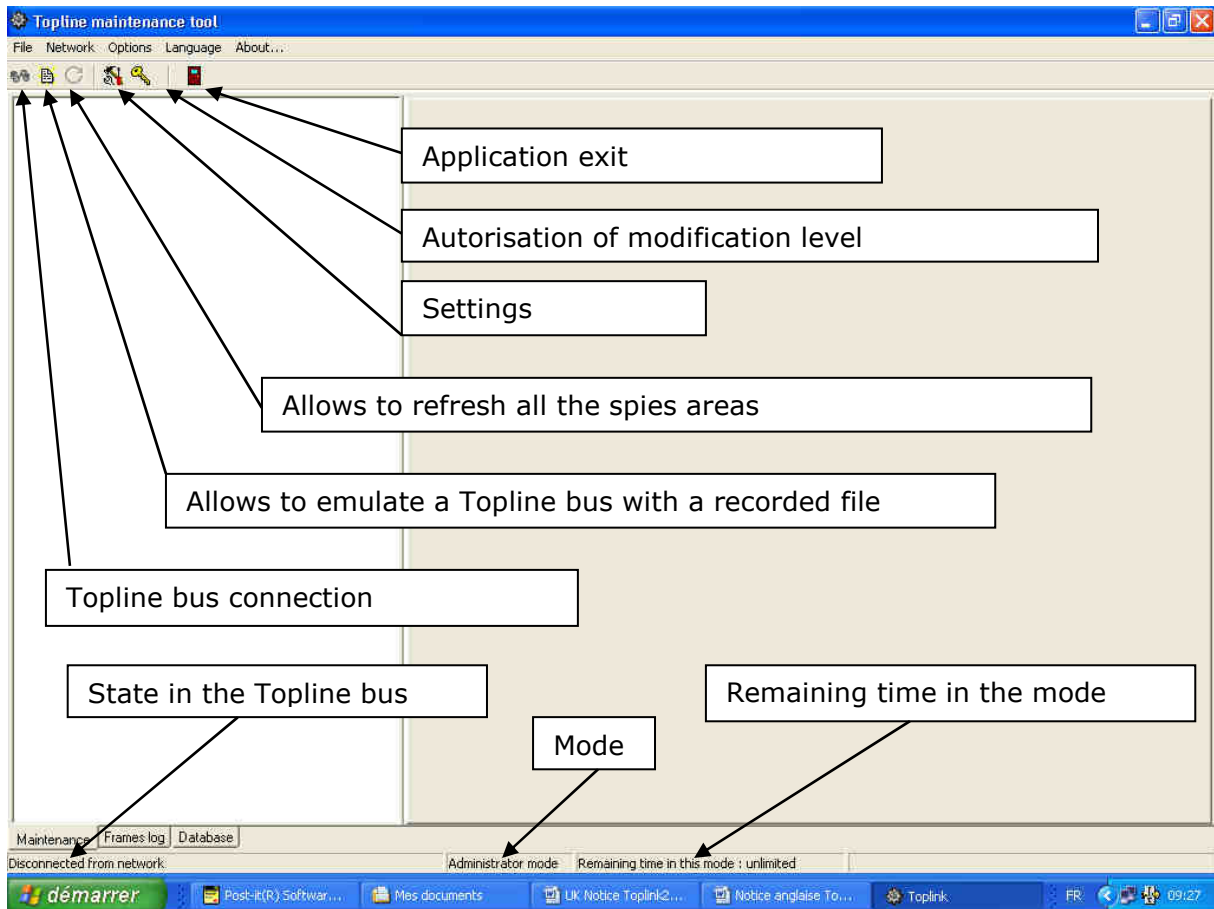
2. Installation

Double-click on the executable file : the installation program will run. Follow the menu during the different stages of the process.

The installation program will install the pilot of the communication port. You must install this pilot on the COM port on which the Prodata Interface cable is connected.

3. First utilisation

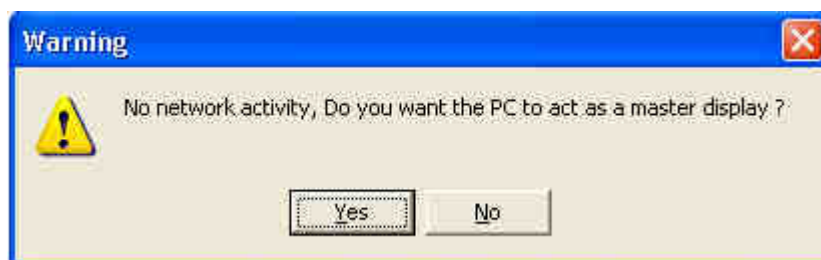
When the software installation is completed you must connect your computer to the Topline bus with the special Topline cable. Then open TOPLINK 2. The following window is displayed :



- If the "master" display is not running with a *Topline +* software then set the "master" display to the address 0
- If the "master" display is running with a *Topline +* software then it is not necessary to set it to 0 because *Toplink* application can take a slave address.

Click on the *Topline* connection bus button.

The following message appears if the the « master » display is not *Topline +* :



Click « yes » to install the computer in master position.

The following window appears and allows to display the instruments connected on the bus and to display them in a structure which gives for each instrument :

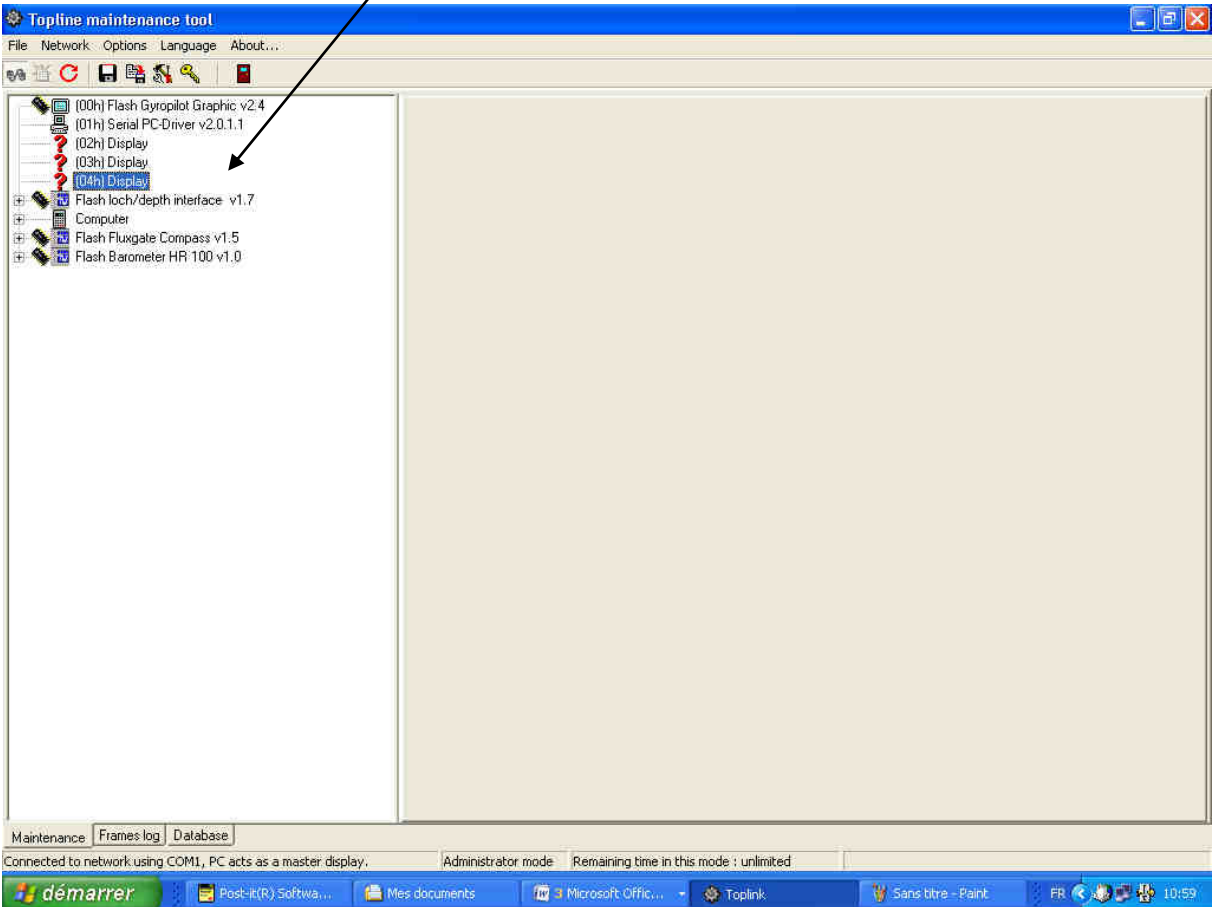
- the name (according the selected language)
- an icon showing the type of family



- an icon showing if it can be flashable or not



- a structure showing the channels of the equipment (in grey if the channel does not answer)



4. Analysis of the different functioning modes

Standard mode

It is authorised by the first level. It allows :

- to read the Topline bus structure,
- to update the software of the Topline equipments if they are fitted with flash ROM,
- to read the soft spies embedded on some Topline equipments (reading of the raw datas in hexadecimal format).

Expert mode

Compared to the standard mode it allows you :

- to read the soft spies in true value,
- to re-initialise them,
- to execute Topline bus recordings (Frames Log tab).

Administrator mode

It gives access to the same functions as in Expert mode and also allows the access to the database.

The activation of the « expert » and « administrator » modes is allowed with a software key supplied by the NKE Customer Department.

Click on autorisation of modification level button in the tool bar, and then on « generate private key » in the « Rights » window.



Communicate this private key to the NKE Customer Department which will supply you the key you must enter in the window « public key ». Then you can activate the new mode of functioning.

6 different modes of functioning are available :

- expert mode 1 hour
- expert mode 1 day
- expert mode unlimited
- administrator mode 1 hour

- administrator mode 1 day
- administrator mode unlimited

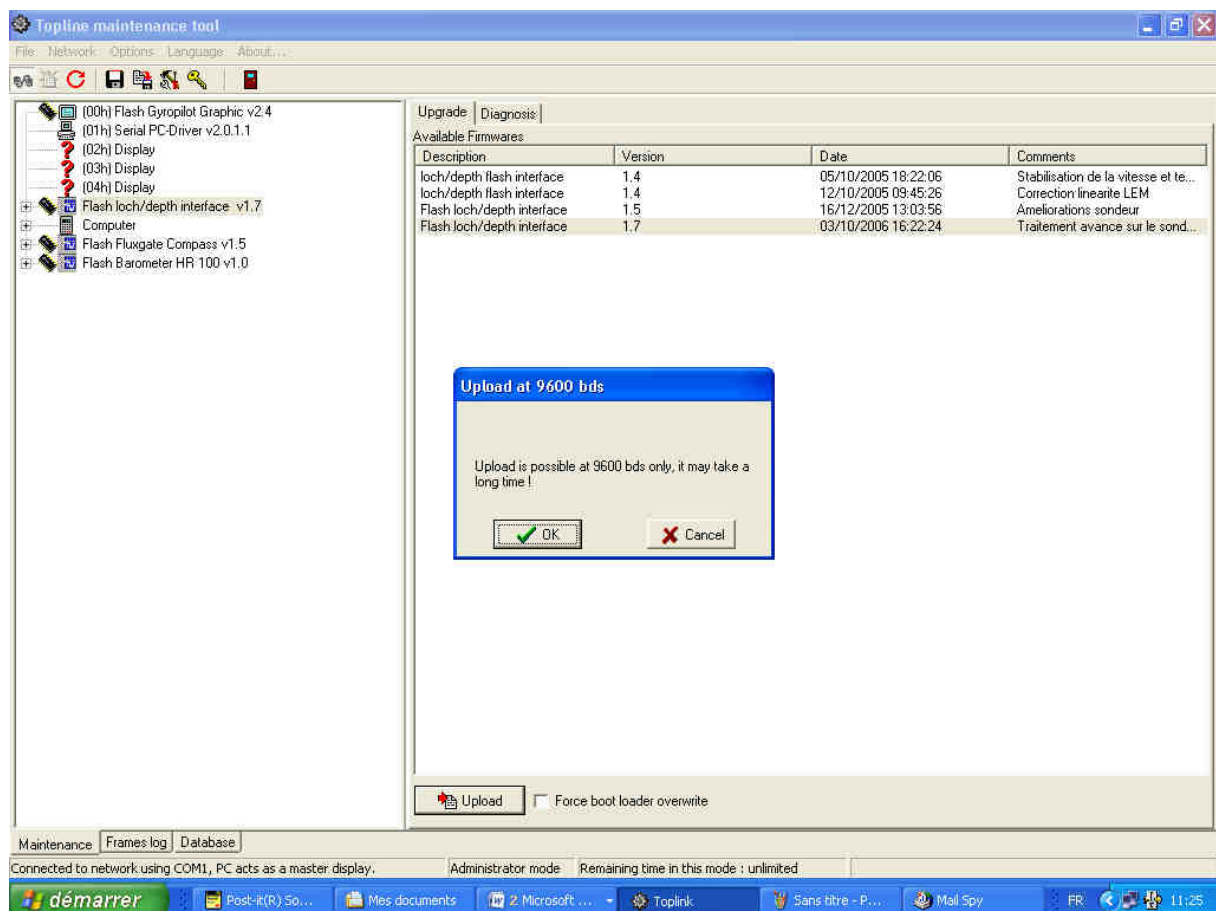
A temporary activation key can be used only one time. The authorized period corresponds to the full available period of the mode.

5. Software update of a Topline equipment

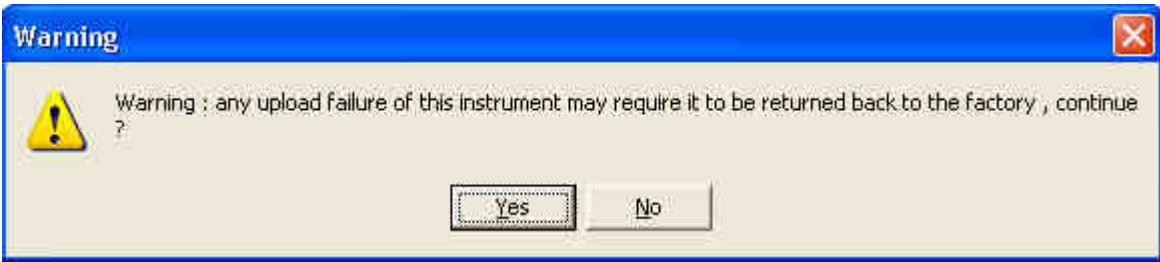
In order to execute the software update of a flashable equipment, the Toplink 2 application needs to find a « .nke » file compatible with this equipment in « C:\Program files\Fichiers communs\nke\Firmware ».

The transfert of the « .nke » files in the Firmware file is done during the execution of the install program of the firmware file which has been downloaded on the NKE web site.

- Click on the element to be updated and then on the « upgrade » tab,
- Select the firmware to download,
- Click on the « upload » button and then on « OK » (the downloading speed on the Topline bus is 9600 bauds)



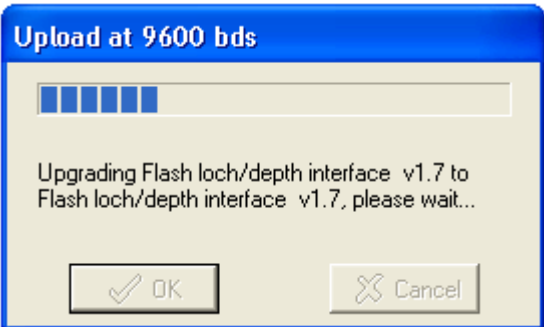
The following message appears :



Caution : Do not break the procedure during the downloading.

During a complete updating a break during the download requires to send the equipment back to factory.

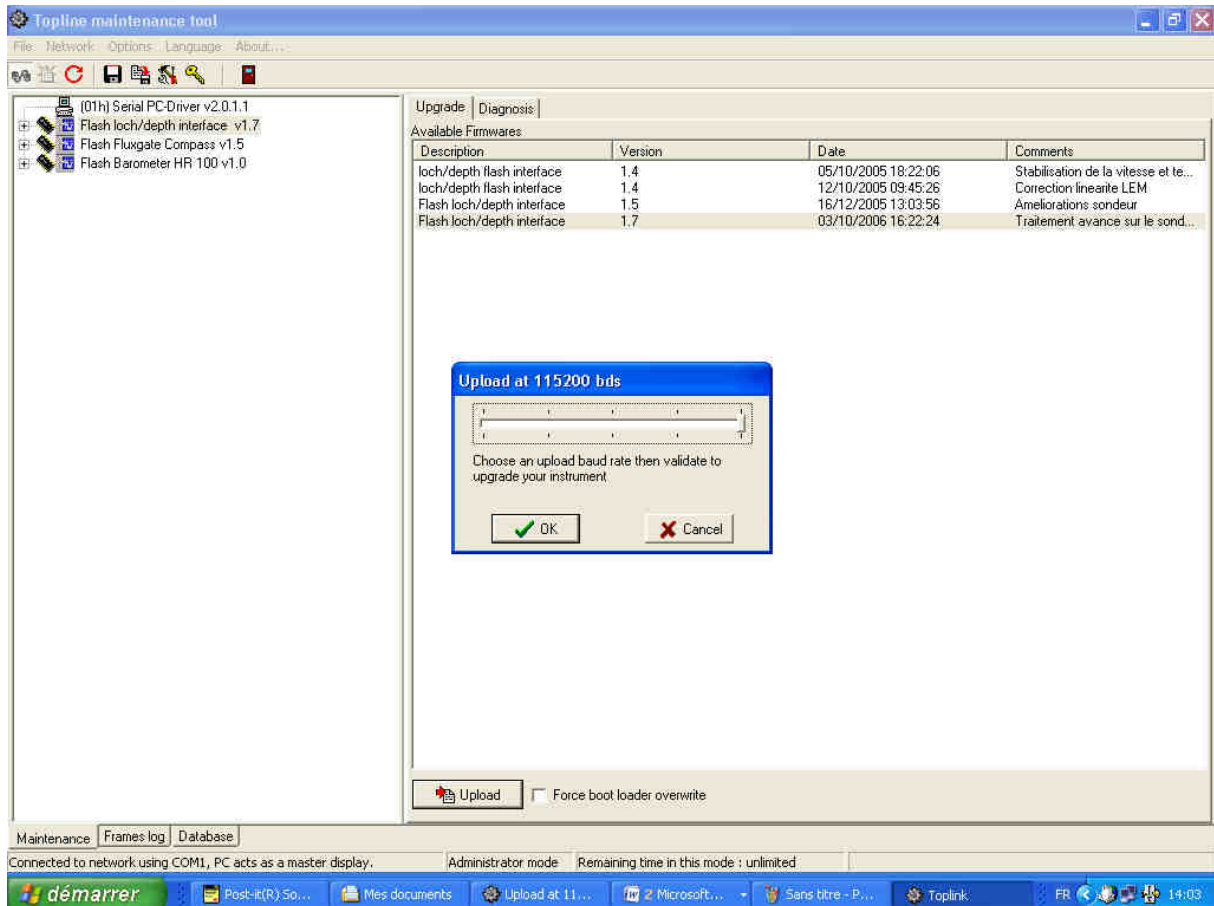
Click on the button « yes » to start the downloading. A progress bar allows to follow the state of the downloading.



At the end of the downloading the following message informs you if it has been executed with success.



When the downloading is executed with a Prodata interface cable and (only)flashable elements it is possible to execute it at a speed of 115200 bauds. In this case a « TrackBar » can be used by the user. In case of problem of communication during the downloading this bar allows to select lower speed in order to execute a new try of downloading.



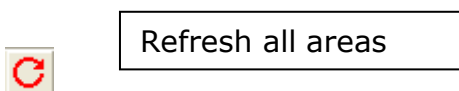
6. Help to diagnosis

Toplink 2 allows to record a file « .tss » where are stored the informations of the bus structure, of the soft spies values (after refresh procedure) and on the parameters of the equipments (for those which have some). This file can be sent to the Customer Department for analysis.

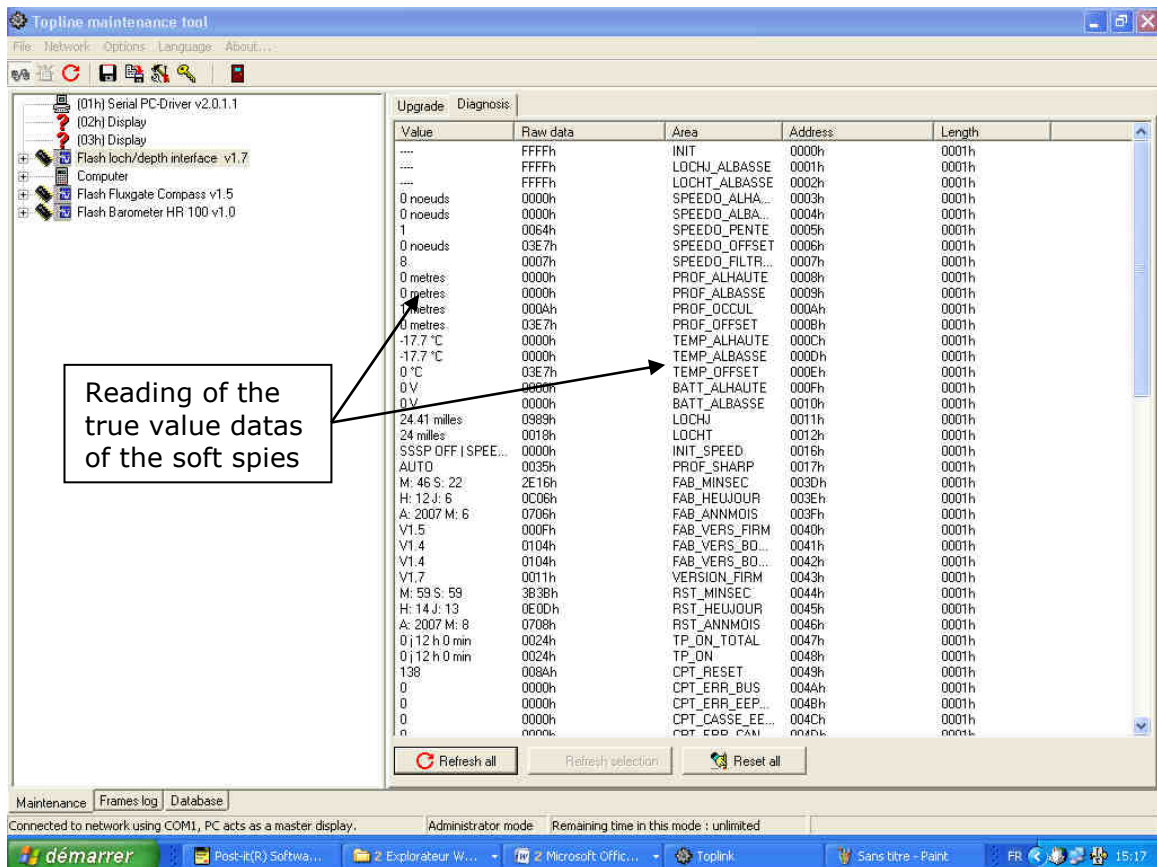
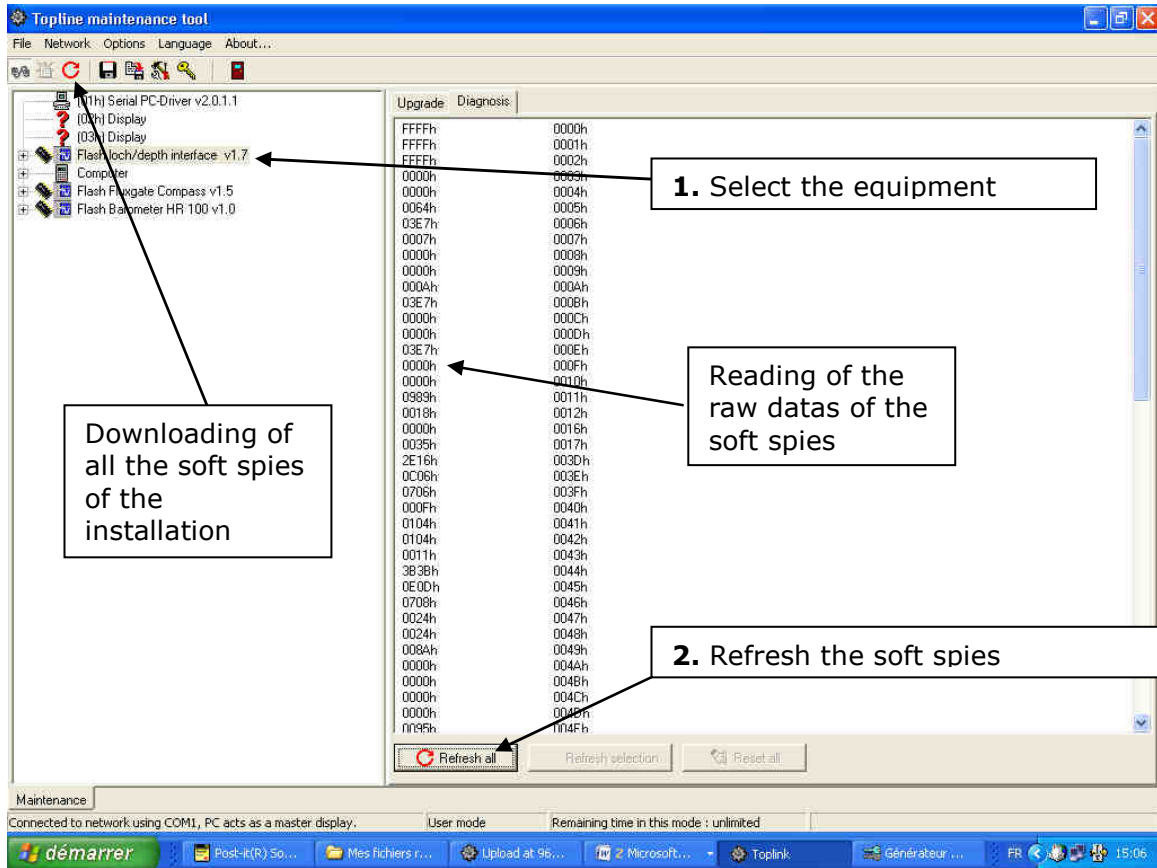
6.1 *Soft spies recording*

When connected to the Topline bus, select in the bus structure the equipment from where you want to read the soft spies. Then in the diagnosis window click the button « refresh all» in order to update these informations.

For a complete diagnosis file click on the button :

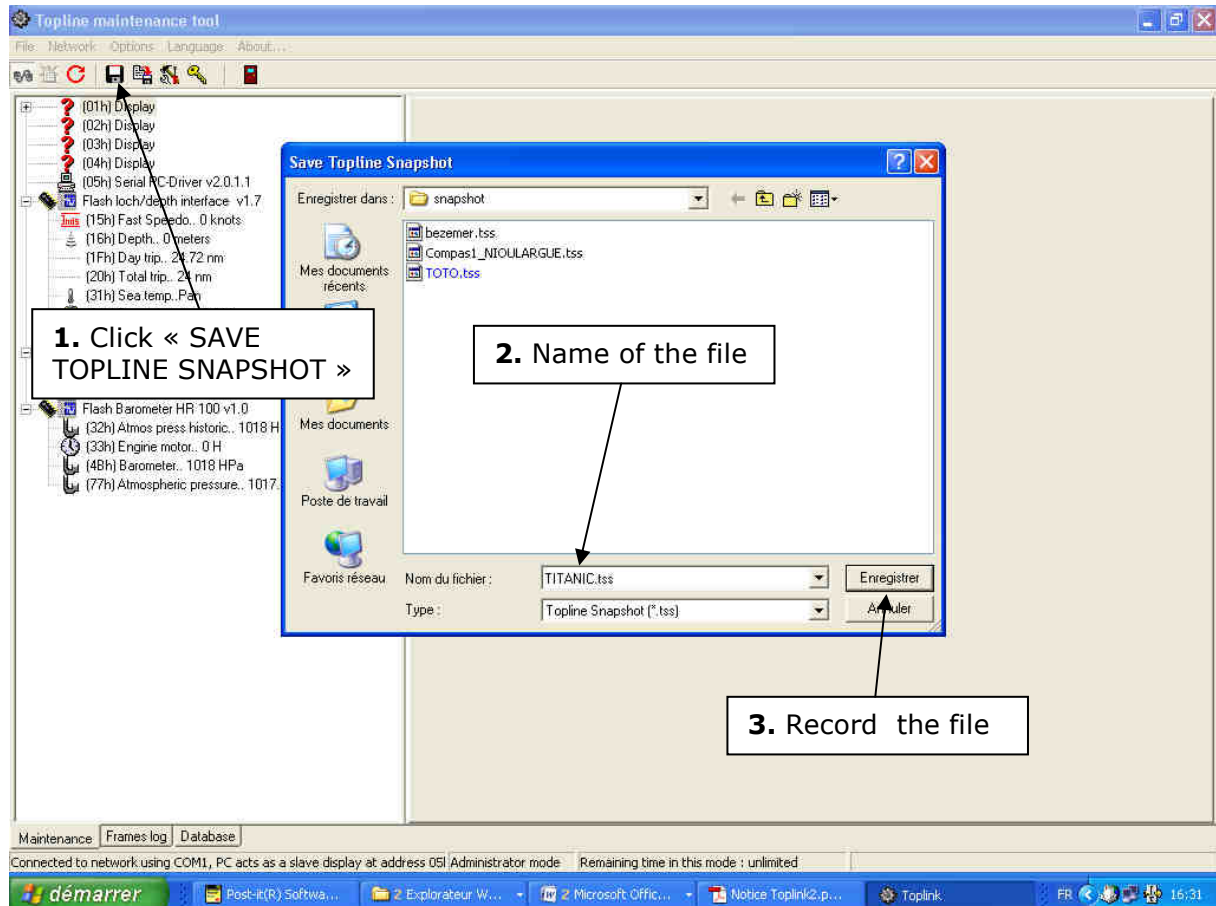


In standard mode the user can access to the hexadecimal values of the soft spies ; he has the same in expert mode with moreover the real values.



6.2 How to record a file

The user can record a binary file (extension « .tss ») called **snapshot** in which are recorded the bus structure and the values of the soft spies which have been refreshed. This file is stored in C:\Program Files\nke\Toplink2\snapshot and can be read again by the Toplink 2 application or sent to the NKE Customer Department for analysis.



Without connection it is possible to read again a « .tss » file with Toplink 2 :

- Click on the item « Network » and then « emulate ... »
- Select the file in the snapshot directory

You can display the bus structure and the value of the different soft spies which have been recorded.

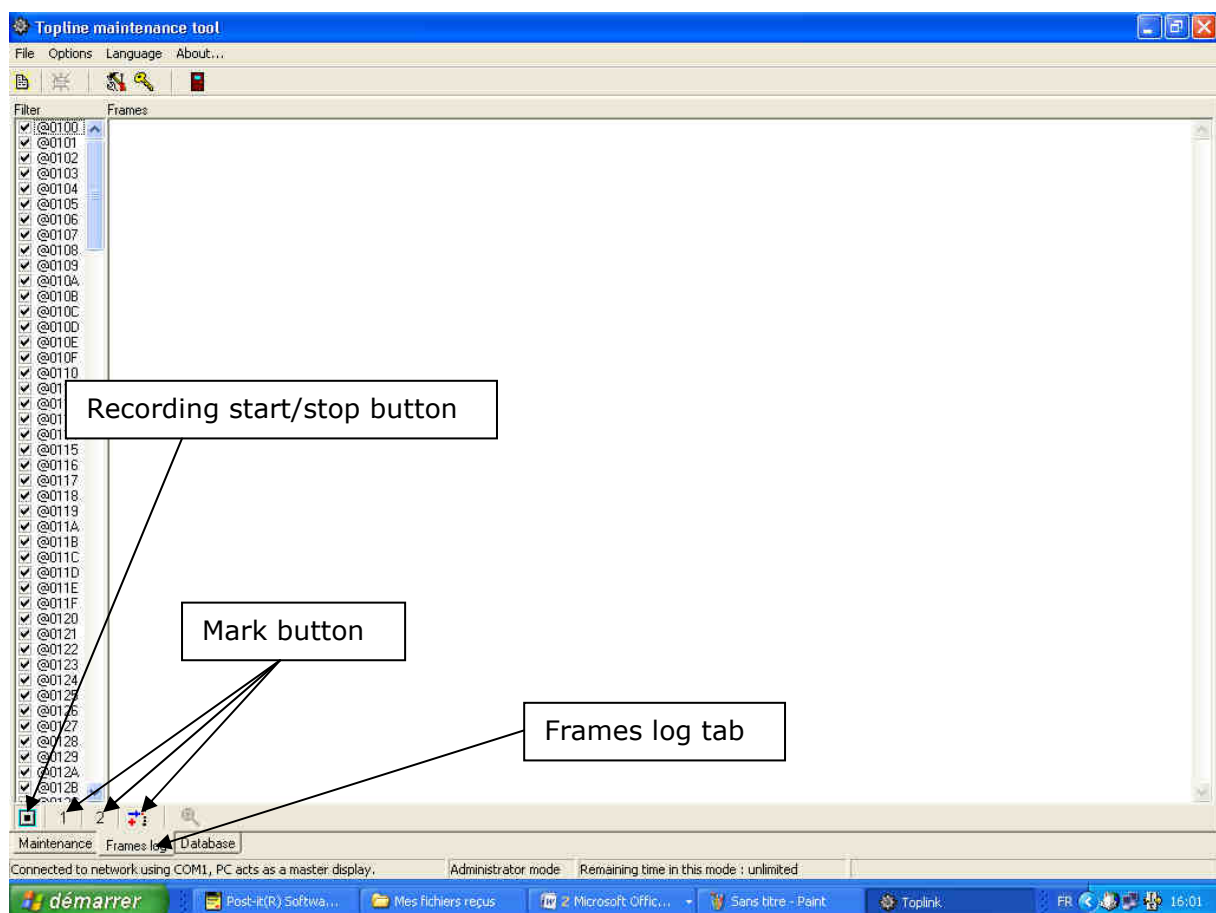
7. Recording the Topline bus

In Expert mode click on « Frames log » tab in order to record the dialogue on the Topline bus.

The bus dialogue is recorded in a zipped file. Later the file can be unzipped (with special tool pizpot.exe) in NKE office for analysis.

The file name is created with date and hour of creation (yymmdd_hhmmss.ctz). In order to limit the size of the file, it only contains 30 minutes of record datas. Then a new file is automatically created during 30 minutes and so on ...

Caution : The zipped file (.ctz) is generated at the end of the record and so you can have to wait at the end of the recording.



- Start to record with the « start » button

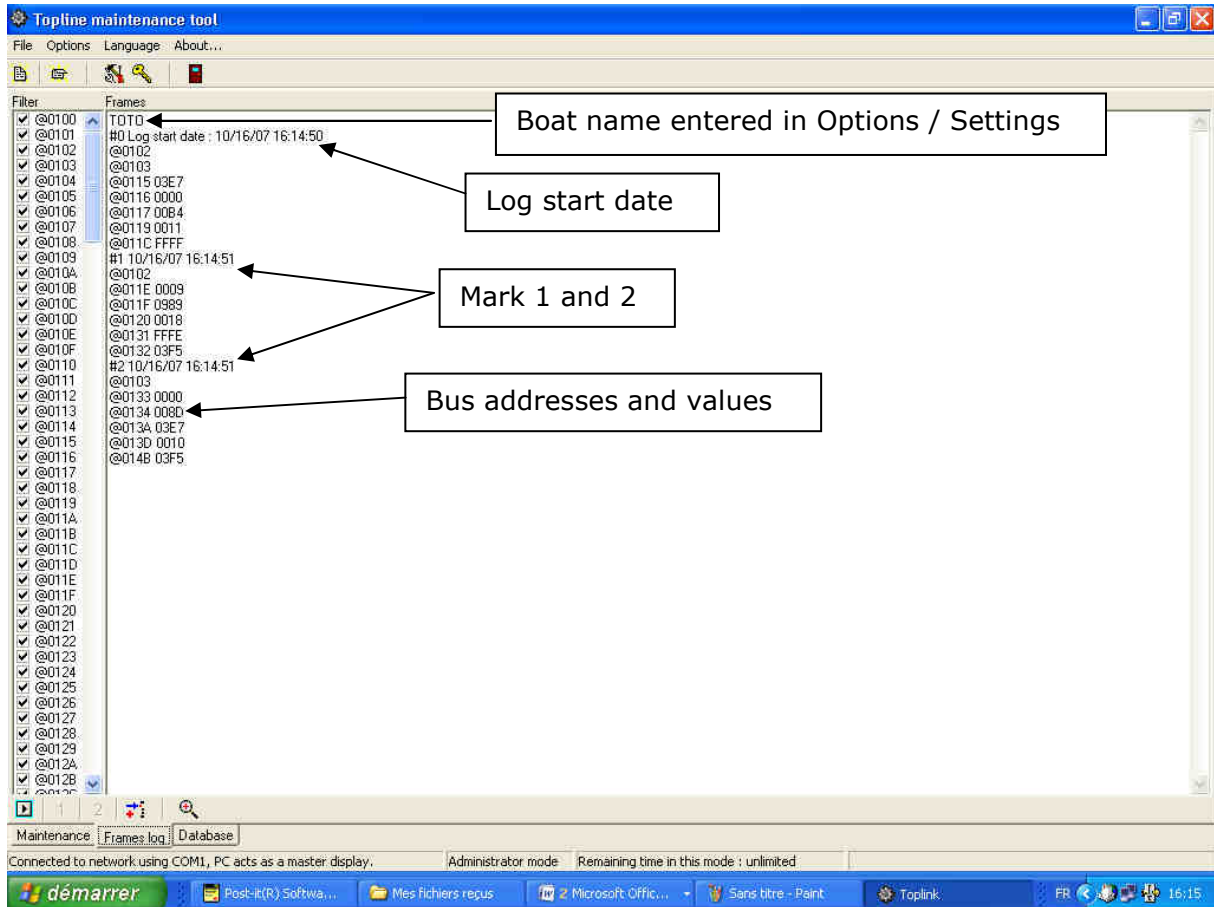


- Press on the « mark » buttons 1 and 2 if you want to mark a special event.
- Close the recording with the « stop » button



The files are stored in directory C:\program files\nke\toplink 2\trace. They can be sent to NKE for analysis.

- At the end of the recording a window allows you to open the last recorded file or to select a file to be analyse.



8. Settings



When you click on this button a window allows you :

- to enter the name of the boat. All the files you record will automatically use this name.
- to select the COM port and the different units used

