



beyond  
payment

## Local Loading Tool (LLT)

### For TELIUM™ Terminals

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# CONTENTS

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<b>1. Introduction</b>	<b>5</b>
<b>2. Environment</b>	<b>5</b>
<b>3. Software installation</b>	<b>5</b>
<b>4. Software removal</b>	<b>6</b>
<b>5. Running the LLT</b>	<b>7</b>
<b>6. Use of LLT functions</b>	<b>8</b>
6.1. Connecting to the terminal	8
6.2. Connection rules	11
6.3. Disconnecting to the terminal	12
6.4. Software component downloading	12
6.5. Parameter files downloading	12
6.6. List of components in the terminal	12
6.7. Uploading diagnostic files (*.DIA)	13
6.8. File selection and transfer	14
6.9. Displaying and consultation	15
6.10. Catalogue file management	19
6.11. Catalogue pack editor	22
<b>7. Views of some files</b>	<b>24</b>
7.1. File LIFECOUNTER.DIA	24
7.2. File BOOSTER?.DIA	24
7.3. File APPDEFAULT.DIA	25
7.4. File APPCOUNTER.DIA	25
7.5. Files *.SIZ	25

<b>8. LLT Setting</b>	<b>26</b>
8.1. File LLT.INI	26
8.2. File LLT.PRM	27
8.3. File LLT.LNG	27
8.4. File LLT.BMK	27
8.5. LLT used in command mode	28
8.6. Displaying the USB connection port number	31
<b>9. Connection Configuration with terminal</b>	<b>32</b>
9.1. USB driver use	32
9.2. Null modem COM port configuration	32
<b>10. Appendices</b>	<b>41</b>
10.1. List of short cut keys	41
10.2. List of icons and their function	41
10.3. Problems and Solutions	42
10.4. Known limitations	43

# 1. Introduction

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This document describes the installation process and the implementation of the Local Loading Tool (LLT). This tool allows the user to download software components or parameter files in the terminals with TELIUM™ technology.

In the continuation of this document, the following designations « terminals with TELIUM™ technology » will be replaced indifferently by the word « terminal » or the abbreviation « EFT ».

To install and use the LLT software follow the different steps described below:

- [Software installation](#)
- [Connection Configuration](#) with terminal according to the used Windows® platform.
- [Use of the LLT Functions](#).

# 2. Environment

---

LLT software is compliant with the following Microsoft® Windows® platforms:

- Windows® XP professional (32 bits)
- Windows® Vista business (32 and 64 bits)
- Windows® 7 professional (32 and 64 bits)
- Windows® 8 professional (32 and 64 bits)

The Windows® XP 64 bits is not supported.

In order for the software to run the computer where the software is installed must have a CD-ROM drive and a serial or USB port.

# 3. Software installation

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You must have **administrative privileges** to install and to uninstall this program. This includes having administrative privileges the first time you start your computer after installing or uninstalling.

**LLT use port IP 6000 for data exchange.** The use of this port must not be forbidden by the network administration (Firewall, Virtual Private Network (VPN)) and must not be used by another application.

Before installing the LLT application, make sure that all applications are closed. Then, insert the CD-ROM containing the LLT software and follow instructions of the LLT setup.

If your PC doesn't run the setup automatically, click "**Start**" button from the task bar, choose "**Run ...**", then "**Browse ...**" CD drive and select "**LLT\_setup.exe**".

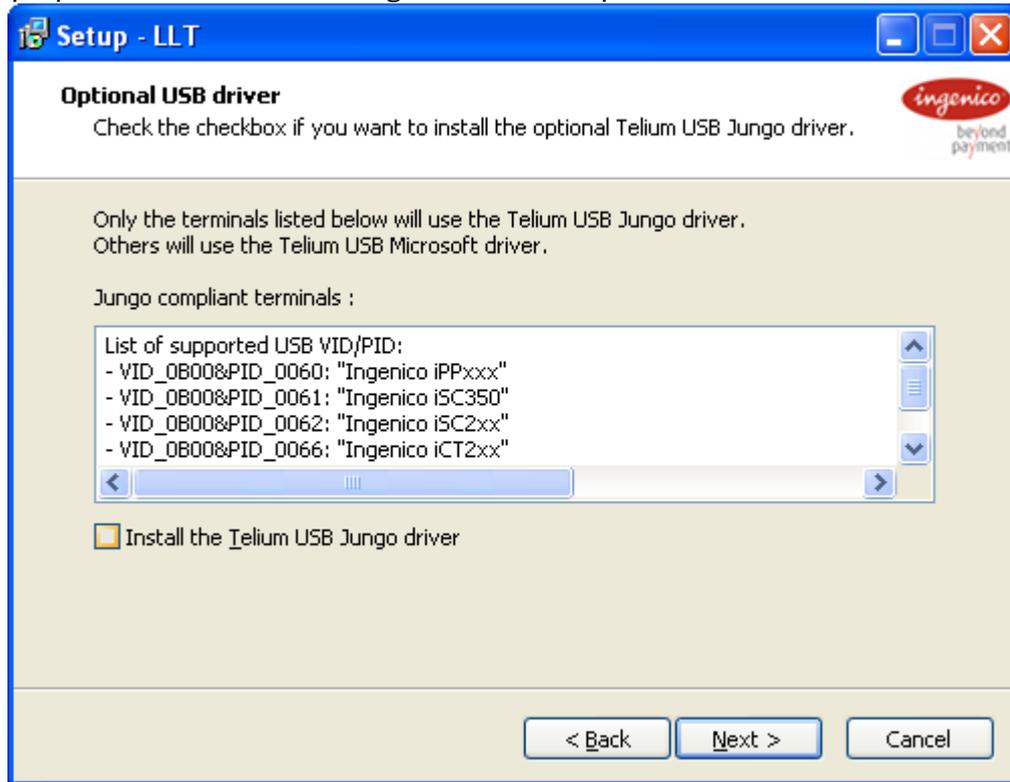
## All Telium terminals are compliant with the Telium USB Microsoft driver.

This driver is automatically installed during the LLT installation.

The LLT setup **includes the optional Telium USB Jungo driver**. However this new USB driver is **compliant with only few Terminals** (see the “Jungo USB - Compliant terminals.txt” file for details).

You would need to use the Jungo driver if you already use this USB driver for another application on your computer.

This driver is proposed to be installed during the installation process:



*Nota:* Windows<sup>®</sup> 8 does not support the Telium USB Microsoft driver, thus only the Telium USB Jungo driver is installed on this platform.

Once you have completed the setup procedure, you can launch the LLT by double-clicking on the LLT icon or from **Start** button Choose: **Programs -> TELIUM Tools -> LLT xx.yy -> LLT xx.yy** (where xx, yy are major and minor version number).

## 4. Software removal

From task bar click **Start** and choose **Programs -> TELIUM Tools -> LLT xx.yy -> LLTxx.yy Uninstall**.

You will probably have to choose to uninstall or not the Telium USB Microsoft driver. Be sure that this driver is no more used by another program before uninstalling it.



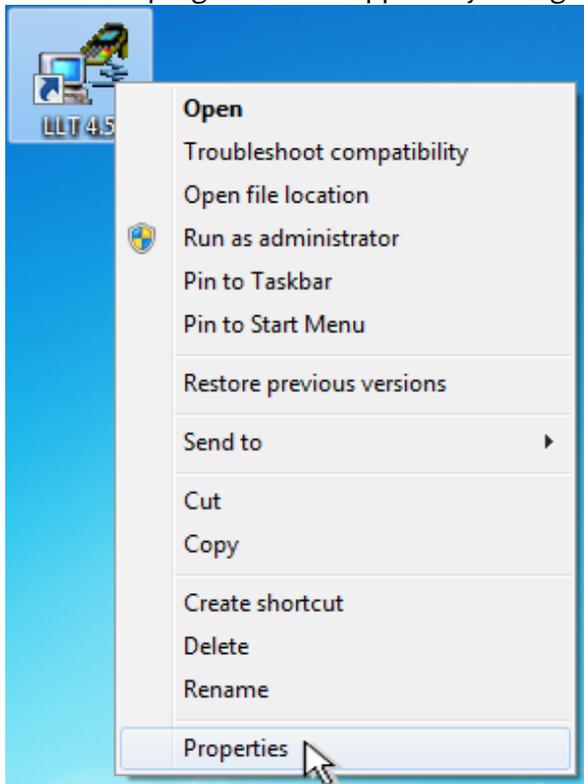
In case you have installed the optional USB Jungo driver with LLT, the uninstall process propose you to uninstall it in the same time:



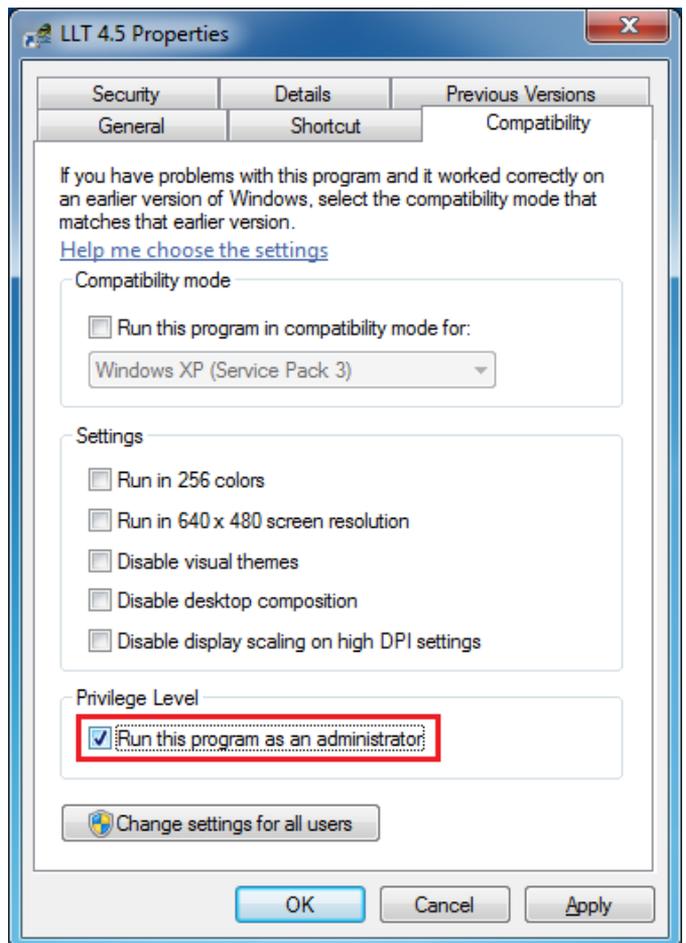
## 5. Running the LLT

In order to allow the configuration of connections and device management through the LLT program (“Serial interface properties...” and “Device manager...” under the **Connection** menu), the **administrator privileges are required** to run it.

On the Microsoft® Windows® Vista and 7 platforms, you can permanently set the administrator privileges for the LLT program can be applied by calling the **Properties** of a LLT shortcut:



Then, in the **Compatibility** panel, check **“Run this program as an administrator”** and click **OK**:



## 6. Use of LLT functions

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LLT allows downloading software components or parameter files in the terminal during a downloading activity. It also may allow uploading diagnostic file during a diagnostic or maintenance activity.

### 6.1. Connecting to the terminal

---

Before the first connection,

- See chapter '[Connection Configuration with terminal](#)' in function of platform Microsoft® Windows® used.
- Make sure the serial cable or the USB cable is correctly connected to the PC and terminal.
- Make sure the terminal is ready to be connected. The terminal must be switched to LLT mode using the key combination: simultaneously pressing '.' and yellow button (to reset the terminal) and then pressing "Up" key. When LLT mode is reached, the "LLT" message is displayed on the terminal screen.

Note: Those key combinations can be applied to most of terminal types. Please refer to your terminal specifications if you couldn't access to the LLT mode.

Different ways to connect:

- with mouse: by clicking on the icon 
- with the LLT menu: **Terminal** → **Connection**
- with shortcut key: **F4**

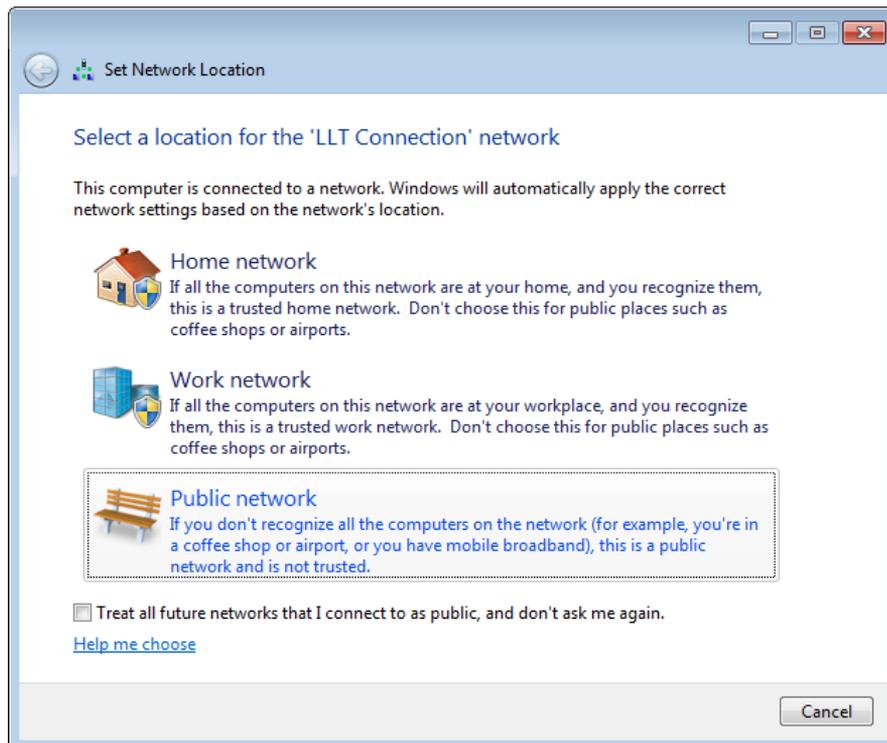
**Warning:** When you try to connect LLT with the terminal for the first time, you probably have the following screen displayed on your screen (especially with the firewall of Windows® Vista or 7).

*Under Windows® 7*

Check **"Public networks"** for this program (LLT) and click **"Allow access"**:



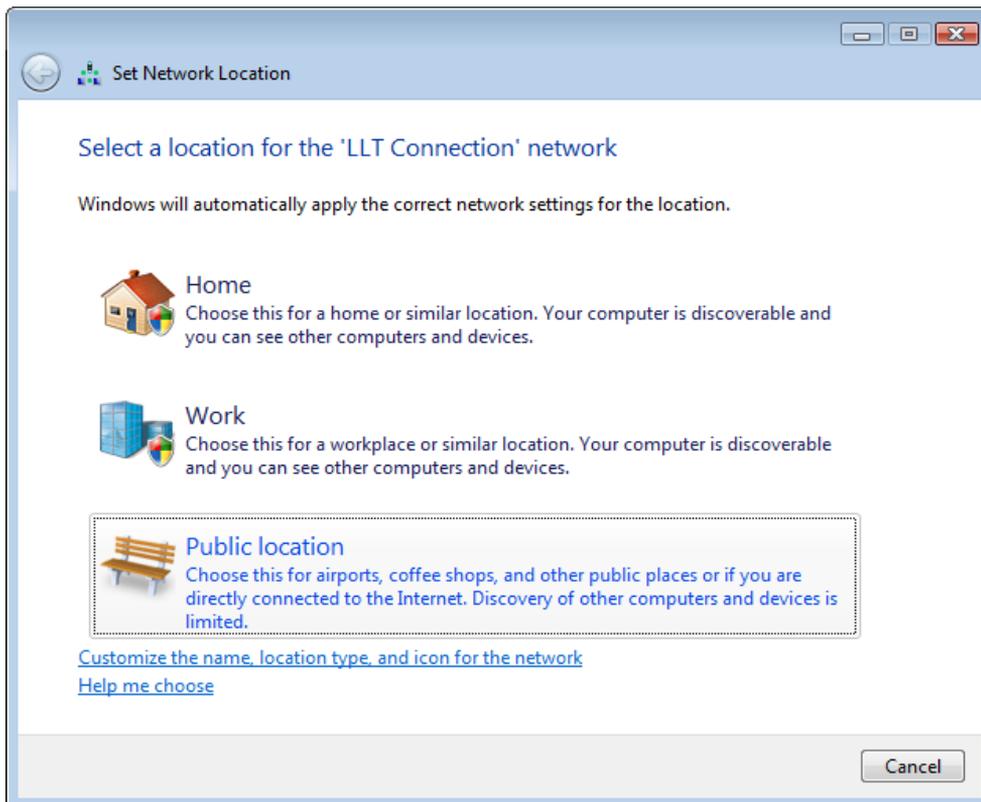
Then, you could also have this following screen. Choose **"Public network"** again:



On Windows® Vista, the following message could appear. Click on the “Unblock” button to allow LLT on the firewall:



Then, you could also have this following screen. Choose “Public location” :



If the access of LLT is denied, the error message “Absence of terminal answer” will be displayed after LLT connection action.

## 6.2. Connection rules

---

### 6.2.1. Definitions

COMs: list of COM ports installed,  
USBs: list of USB ports with a terminal connected.  
For LLT options see [LLT.ini](#) file description.

### 6.2.2. Graphical mode

- Option 'EnumUSB' is on (yes: default value). Priority is given to USB link.
  - A single terminal connected in USBs  
→ trying to connect with this terminal,
  - More than one terminal connected in USBs  
→ a dialog box is opened to select which USB port to use.
  - No terminal connected in USBs  
→ trying to connect using the port selected in the window 'LLT Connection properties' (LLT menu : **Connection** → **Connection configuration**).
- Option 'EnumUSB' is off (no)  
The attempt to connect is made with the port selected in the window 'LLT Connection properties' (LLT menu : **Connection** → **Connection configuration**).

### 6.2.3. Command mode

(see chapter : [LLT used in command mode](#))

- Option 'EnumUSB' is on (yes: default value)
  - Number of port provided (with -x parameter)
    - it is present in COMs and in USBs  
→ trying to connect using this port,
    - it is absent in USBs and a single terminal connected to USB  
→ trying to connect with this terminal,
    - it is present in COMs and USBs is empty,  
→ trying to connect using this port,
    - it is absent in COMs  
→ Error (-19),
  - Number of port not provided (without -x parameter )
    - if a single terminal connected to USB  
→ trying to connect with this terminal,
    - zero or more terminals connected to USB  
→ Error (-19),
- Option 'EnumUSB' is off (no)
  - Number of port provided (with -x parameter)
    - it is present in COMs  
→ trying to connect using this port,
    - it is absent in COMs  
→ Error (-19),
  - Number of port not provided (without -x parameter )

→ trying to connect using the last port used (in the last connection).

### 6.3. Disconnecting to the terminal

---

The LLT must be disconnected before unplugging the cable. This will cause a reset of the terminal.

Different ways to disconnect:

- with mouse: by clicking on the icon 
- with the menu: **Terminal** → **Disconnect**
- with shortcut keys: **CTRL + F4**

### 6.4. Software component downloading

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- Select the downloading activity in the LLT menu: **Activity** → **Downloading**.
- Connect to the terminal (see [Connecting to the terminal](#)).
- Move in the LLT explorer in order to select the catalogue files corresponding to the components to be downloaded (see [File selection](#)).
- Download the component(s) in the SWAP directory of the terminal (see [File transfer](#)).
- Disconnect (see [Disconnecting from the terminal](#)). After the reset terminal, the valid components are transferred in the SYSTEM directory in order to be used.

### 6.5. Parameter files downloading

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You can download a parameter file usable by an application in the **HOST** directory of the terminal.

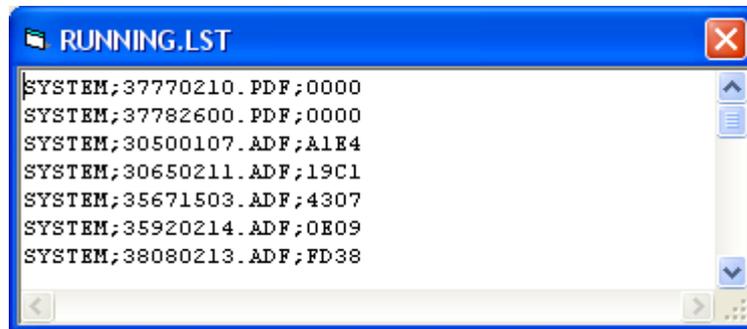
Note: the application using this parameter file will have to delete it after using.

- Select the downloading activity in the LLT menu: **Activity** → **Downloading**.
- Connect to the terminal (see [Connecting to the terminal](#)).
- Go to **HOST** directory by clicking  icon (or with **CTRL+B** keys) and double-click on HOST directory (terminal side).
- Move in the LLT explorer (PC side) in order to select the files to be downloaded (see [File selection](#)).
- Download the component(s) in the HOST directory of the terminal (see [File transfer](#)).
- Disconnect (see [Disconnecting from the terminal](#)).

### 6.6. List of components in the terminal

---

- Select the downloading activity in the LLT menu: **Activity** → **Downloading**.
- Connect to the terminal (see [Connecting to the terminal](#)).
- Double click on RUNNING.LST file or used the LLT menu: **Terminal** → **Component list** or **CTRL + F** shortcut keys to display the component list.



```
SYSTEM;37770210.PDF;0000
SYSTEM;37782600.PDF;0000
SYSTEM;30500107.ADF;A1E4
SYSTEM;30650211.ADF;19C1
SYSTEM;35671503.ADF;4307
SYSTEM;35920214.ADF;0E09
SYSTEM;38080213.ADF;FD38
```

## 6.7. Uploading diagnostic files (\*.DIA)

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- Select the downloading activity in the LLT menu: **Activity** → **Diagnostic**.
- Connect to the terminal (see [Connecting to the terminal](#)).
- Select the diagnostic files in the terminal view to be uploaded (see [File selection](#)).
- Transfer the file(s) in a PC directory (see [File transfer](#)).
- Disconnect (see [Disconnecting from the terminal](#)).
- Display content of diagnostic files (see [LifeCounter.dia](#) , [Booster.dia](#), [AppDefault.dia](#) or [AppCounter.dia](#))

## 6.8. File selection and transfer

### 6.8.1. File selection

The file selection is made in the same way as Windows Explorer:

- select a file by clicking on it,
- select all the files pressing simultaneously **Ctrl + A** keys,
- select contiguous files by clicking on a file with '**Shift**' key,
- select non-contiguous files by clicking on a file with '**Ctrl**' key,

#### 6.8.1.1. Selection a catalogue file

Selecting '\*.Mxx' in the file type list  (Mxx corresponding to the catalogue file extension) allows the user to view catalogue files in the current directory. **When a catalogue file transfer is carried out, all files present in that catalogue file will be transferred.**

#### 6.8.1.2. Selecting a package

It is possible to transfer files presents in a package built from 'IngPackager' tool by selecting the 'descriptor.xml' file and downloading (drag&drop). Only the '<application > ... </application>' and '<data> ... </data>' tags are supported.

**Warning:** The '<requirements>' tags are not supported. All files associated with the terminal product type and with the '<application>' tag and files with the '<data>' tag are downloaded.

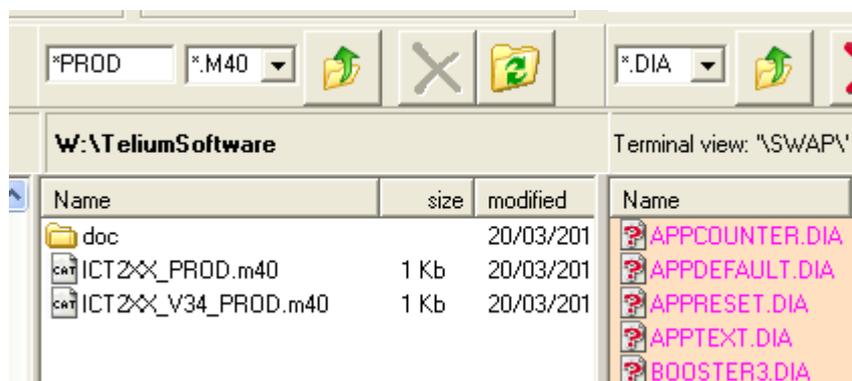
#### 6.8.1.3. Selecting a file list

Selecting "\*.\*)" in the file type list, allows the user to view all files and sub directories from the current directory. In this mode all selected files will be transferred.

### 6.8.2. Filter function

A filter function is available for remote and local file browser.

Usage of wildcard characters ("\*" and "?") is implemented.



The first field designates the filename filter, and the combo box filters the extension.

For example, if you input "\*PROD" in the text field, all files which name ends with "PROD" will be displayed.

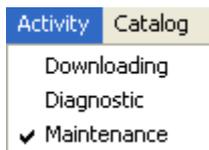
In addition, if you select the "\*.M40" extension, only catalogue files for the product code M40 which name ends with "PROD" will be displayed.

### 6.8.3. File transfer

Once connection has been established (see [Connecting to the terminal](#)) and once files have been selected (see [File selection](#)):

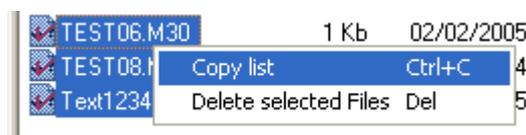
- with the menu: **Terminal** → **File downloading** or **Terminal** → **File uploading**
- with mouse: drag and drop (from the source window to destination window).
- with shortcut keys: **F2** or **CTRL + F2**

By default the remote downloading activity is selected. Maintenance and diagnostics activities are also possible from LLT by selecting the menu "**Activity**".



### 6.8.4. Copy File List

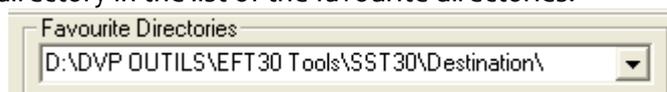
You can copy the list of selected file from the current view to the clipboard with the popup menu or with the **CTRL + C** keys.



## 6.9. Displaying and consultation

### 6.9.1. Direct access to a directory of the computer

Select the directory in the list of the favourite directories.



To **add** a path in the list selects a directory in the tree view:

- with shortcut keys : **SHIFT + INS**
- or with the popup menu (with the right button of the mouse).



To **delete** a path in the list, select the directory name in the tree view:

- with shortcut keys: **SHIFT + DEL**
- or use the popup menu (with the right button of the mouse).



When the LLT application is closed, it is possible to automatically add the current directory in the list of the favourite directories with the option 'Auto\_bmk=yes' in file LLT.ini (default value: no). At the next LLT execution, this directory will be the current directory.

Another option 'Update\_bmk' (default value: yes) can be used. The list of the favourite directories is automatically checked and updated (with disks present) when LLT is launched.

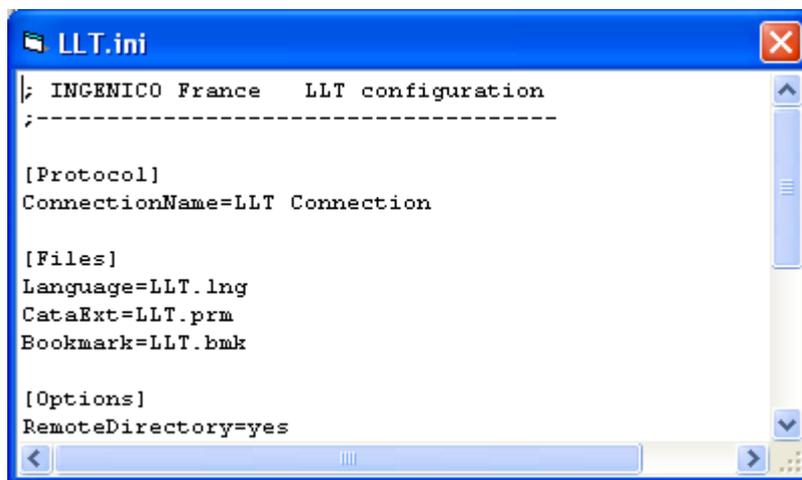
### 6.9.2. Direct access to a directory of the computer

From PC View use **CTRL + J** keys to go to Terminal view or click on the Terminal view.

From Terminal View use **CTRL+ K** keys to go to PC view or click on the PC view.

### 6.9.3. Direct access to a file contents

A double click on the file itself or press Return key after selecting the file displays in a window the file contents in text mode.



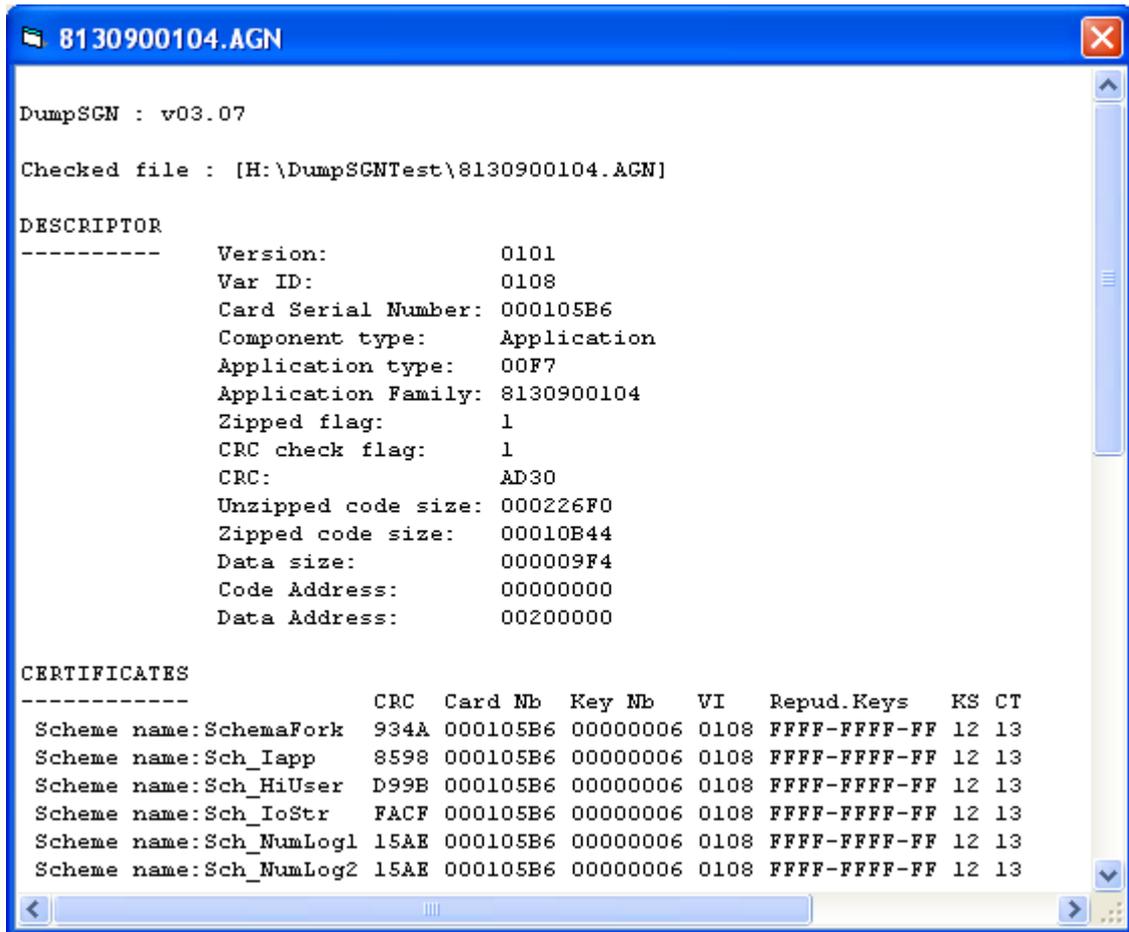
```
LLT.ini
|; INGENICO France   LLT configuration
|-----|
[Protocol]
ConnectionName=LLT Connection

[Files]
Language=LLT.lng
CataExt=LLT.prm
Bookmark=LLT.bmk

[Options]
RemoteDirectory=yes
```

#### 6.9.4. Component signature consultation

Select '\*.\*' in the list  then Double click on a file with extension '\*.GN' (.SGN, .AGN, .PGN, ...) corresponding to a signed component to consult . The option 'Certif\_SGN' in file LLT.ini must be set to on (default value: off).



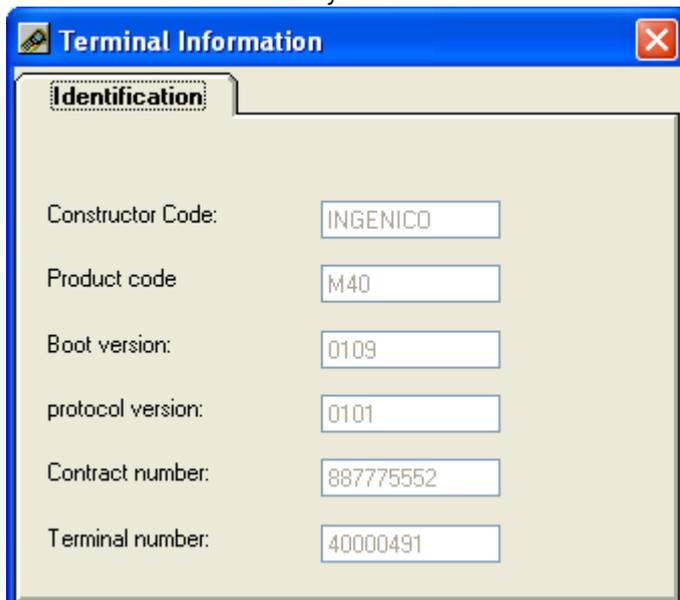
```
DumpSGN : v03.07
Checked file : [H:\DumpSGNTest\8130900104.AGN]

DESCRIPTOR
-----
Version:                0101
Var ID:                 0108
Card Serial Number:    000105B6
Component type:        Application
Application type:      00F7
Application Family:    8130900104
Zipped flag:           1
CRC check flag:        1
CRC:                   AD30
Unzipped code size:    000226F0
Zipped code size:      00010B44
Data size:             000009F4
Code Address:          00000000
Data Address:          00200000

CERTIFICATES
-----
          CRC  Card Nb  Key Nb  VI  Repud.Keys  KS  CT
Scheme name:SchemaFork  934A 000105B6 00000006 0108 FFFF-FFFF-FF 12 13
Scheme name:Sch_Iapp    8598 000105B6 00000006 0108 FFFF-FFFF-FF 12 13
Scheme name:Sch_HiUser  D99E 000105B6 00000006 0108 FFFF-FFFF-FF 12 13
Scheme name:Sch_IoStr   FACF 000105B6 00000006 0108 FFFF-FFFF-FF 12 13
Scheme name:Sch_NumLog1 15AE 000105B6 00000006 0108 FFFF-FFFF-FF 12 13
Scheme name:Sch_NumLog2 15AE 000105B6 00000006 0108 FFFF-FFFF-FF 12 13
```

### 6.9.5. Terminal identification consultation

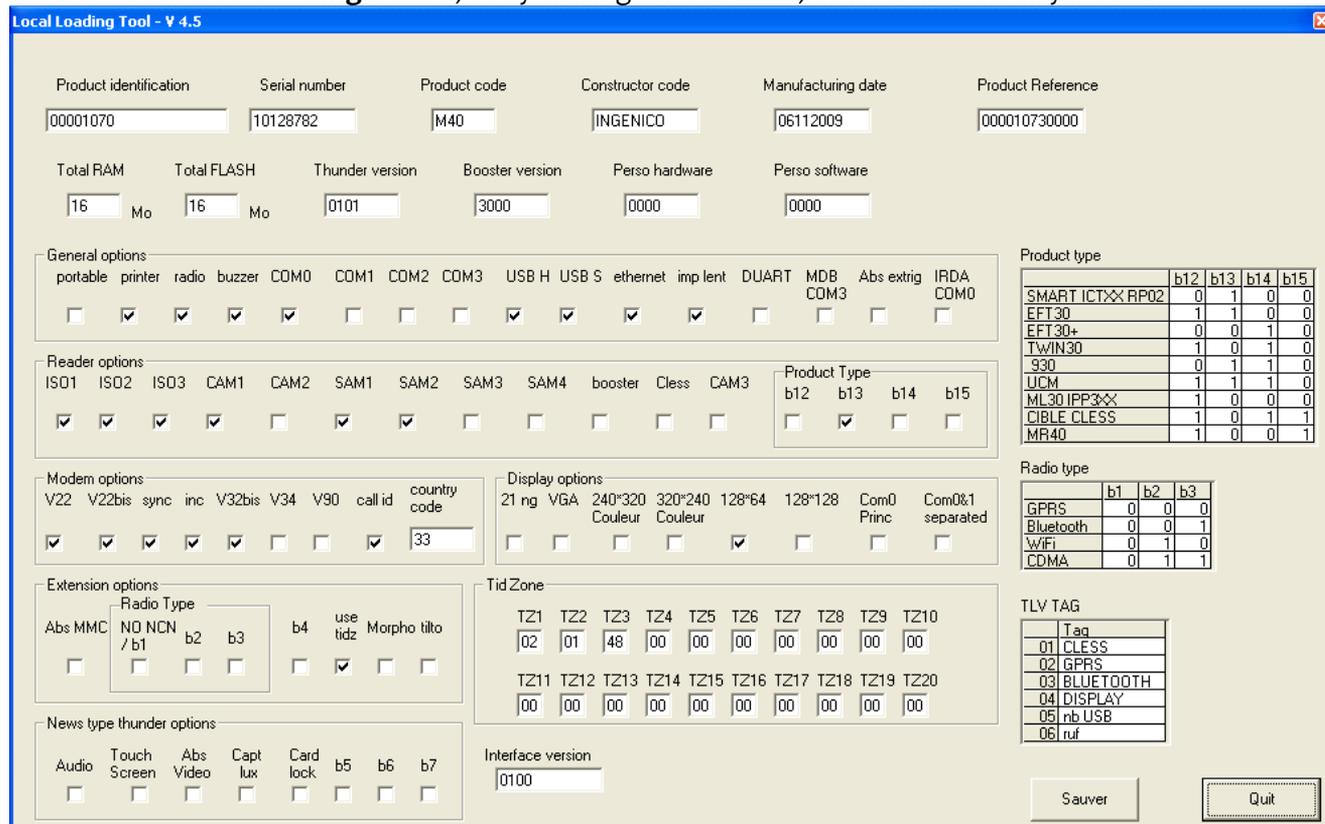
Once a connection has been established, terminal characteristics can be displayed with the menu: **Terminal** → **Identification** or with shortcut keys: **CTRL + I**.



### 6.9.6. Terminal configuration consultation

When the current activity is 'Maintenance' and once connection has been established, terminal configuration can be displayed with the menu:

**Terminal** → **Configuration**, or by clicking on icon , or with shortcut keys: **CTRL + J**



## 6.10. Catalogue file management

### 6.10.1. About catalogue files

Catalogue files specify a list of files to be easily downloaded into the terminal. Their file extension is in “\*.M??” form, with the two last digits which designate the product code of the target terminal.

You can edit them in LLT (see sections below), or in an external text editor (for example Microsoft® Notepad) in order to specify enhanced file paths. Following forms of paths are supported:

Sample	Description
C:\Dir\SAMPLE.SGN	Absolute path
SAMPLE.SGN	Relative path: same directory as the catalogue file
.\SubDir\SAMPLE.SGN	Relative path: SubDir\ is in the catalogue directory
..\SAMPLE.SGN	Relative path: parent directory from the catalogue directory
..\..\OtherDir\SAMPLE.SGN	Relative path: two parent directories and in the OtherDir\ directory
\SAMPLE.SGN	Relative path: root of the catalogue drive

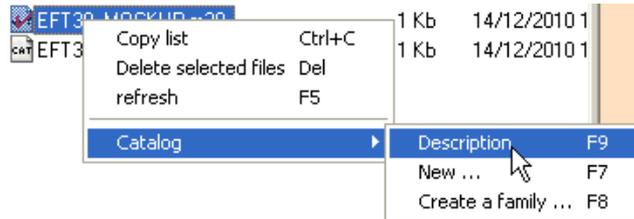
Network paths (“\\Server\”) are not supported by LLT. To use them, map them with a network drive letter.

### 6.10.2. Consulting catalogue file

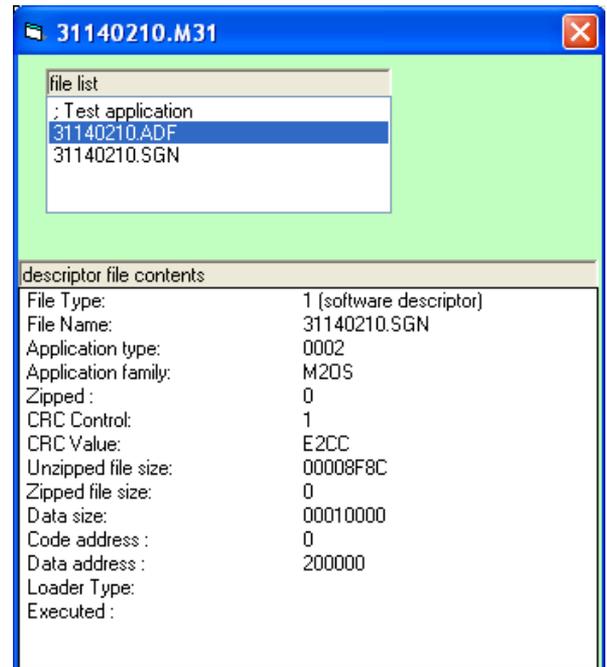
The catalogue description



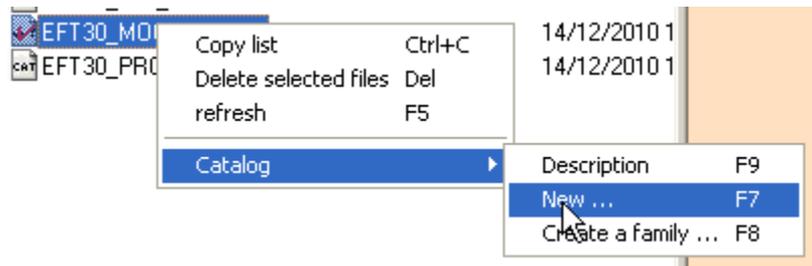
is displayed each time a catalogue file is selected.



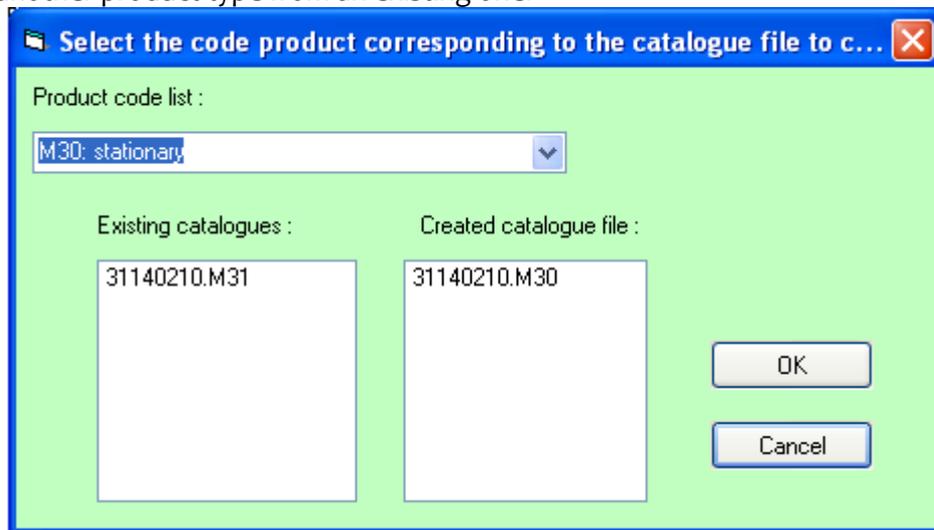
Double-click on a catalogue file, use contextual menu (with right click), or hit the **F9** key after selecting a catalogue file, allows the user to view the catalogue file contents and its associated descriptor file and the signed file (see [Component signature consultation](#)) contents by selecting it in the file list.



### 6.10.3. Create a new catalogue file

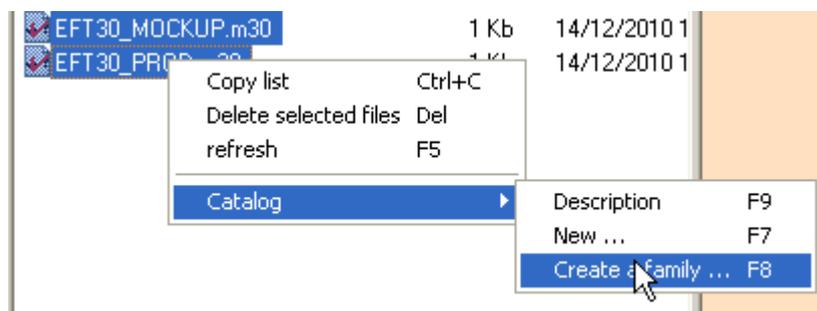


Use contextual menu (with right click) or **F7** key after selecting files. This allows the user to create catalogue files for another product type from an existing one.

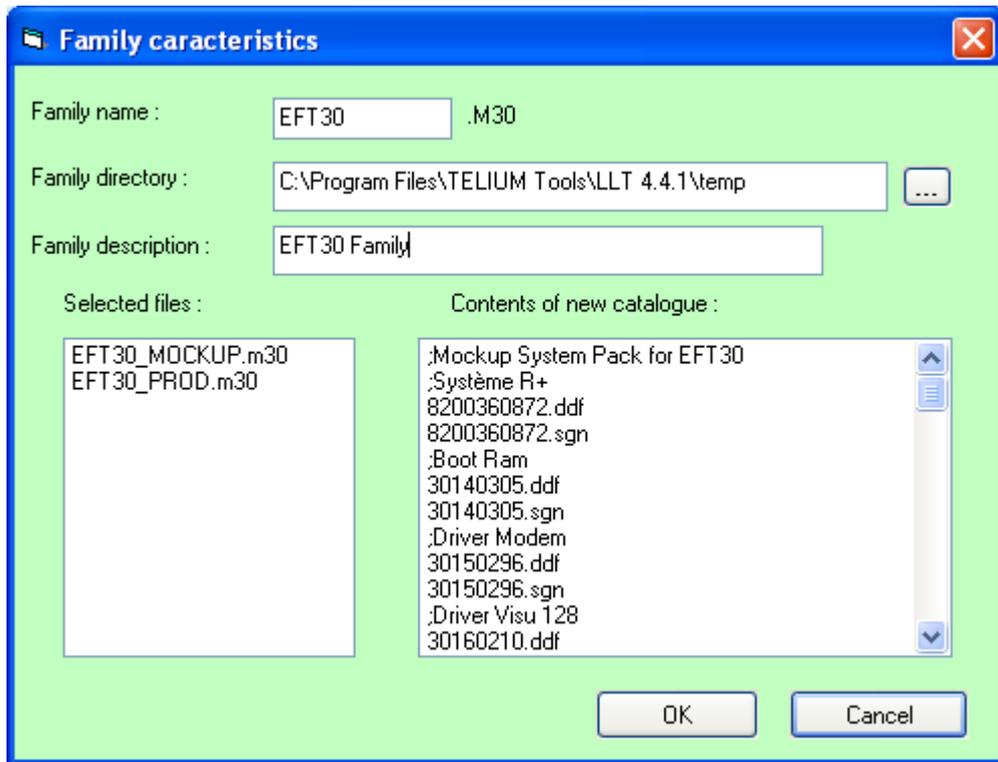


### 6.10.4. Create a family

This function allows the user to create a family for a same product type. This function is only accessible after selecting the \*.Mxx (Mxx corresponding to the catalogue file extension) in the list associated to the file list. Use contextual menu (with right click) or **F8** key after selecting catalogue files.



The new catalogue file will be created from one or more catalogue files for a same terminal and stored in the family directory (destination). All files present in the source catalogue files are copied to the specified directory.



### 6.10.5. Deletion of a catalogue file

When you delete a catalogue file, the software deletes associated files, only if they are not used by other files.

## 6.11. Catalogue pack editor

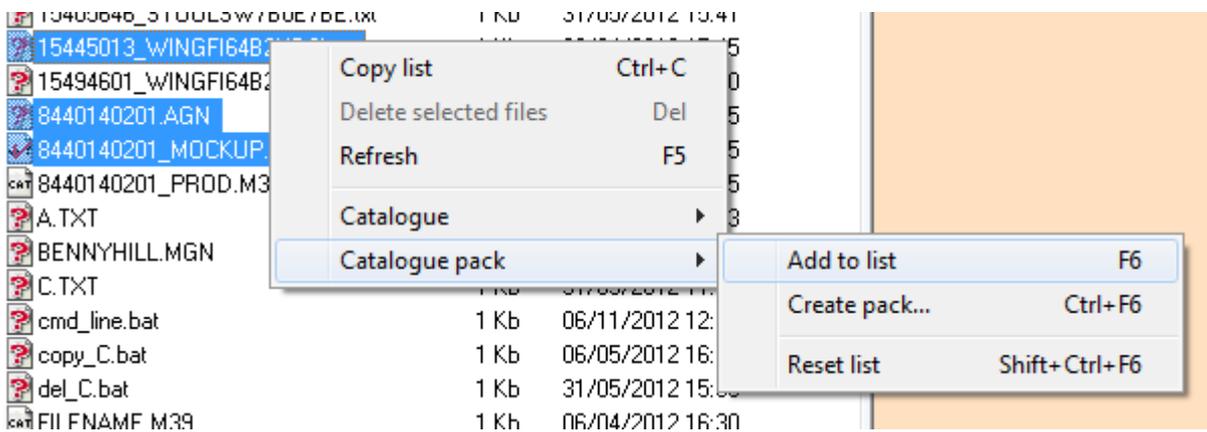
The catalogue pack is a feature which allows creating a set of files and catalogues files, grouped into a root directory.

As the result, this catalogue pack collects all files designated in selected catalogues and files, copies them in a target folder and generates a catalogue which lists all these files.

The catalogue pack facilitates the exportation of a set of catalogues files and files, and that's a way to merge catalogues and files from several origins.

### 6.11.1. Add files to the catalogue pack

In order to add a file or a catalogue file to the catalogue pack list, you can right-click on selected files of the local browser view (see [File selection](#) section), then click on “**Catalogue pack**” > “**Add to the list**” of the contextual menu, or press the **F6** key:

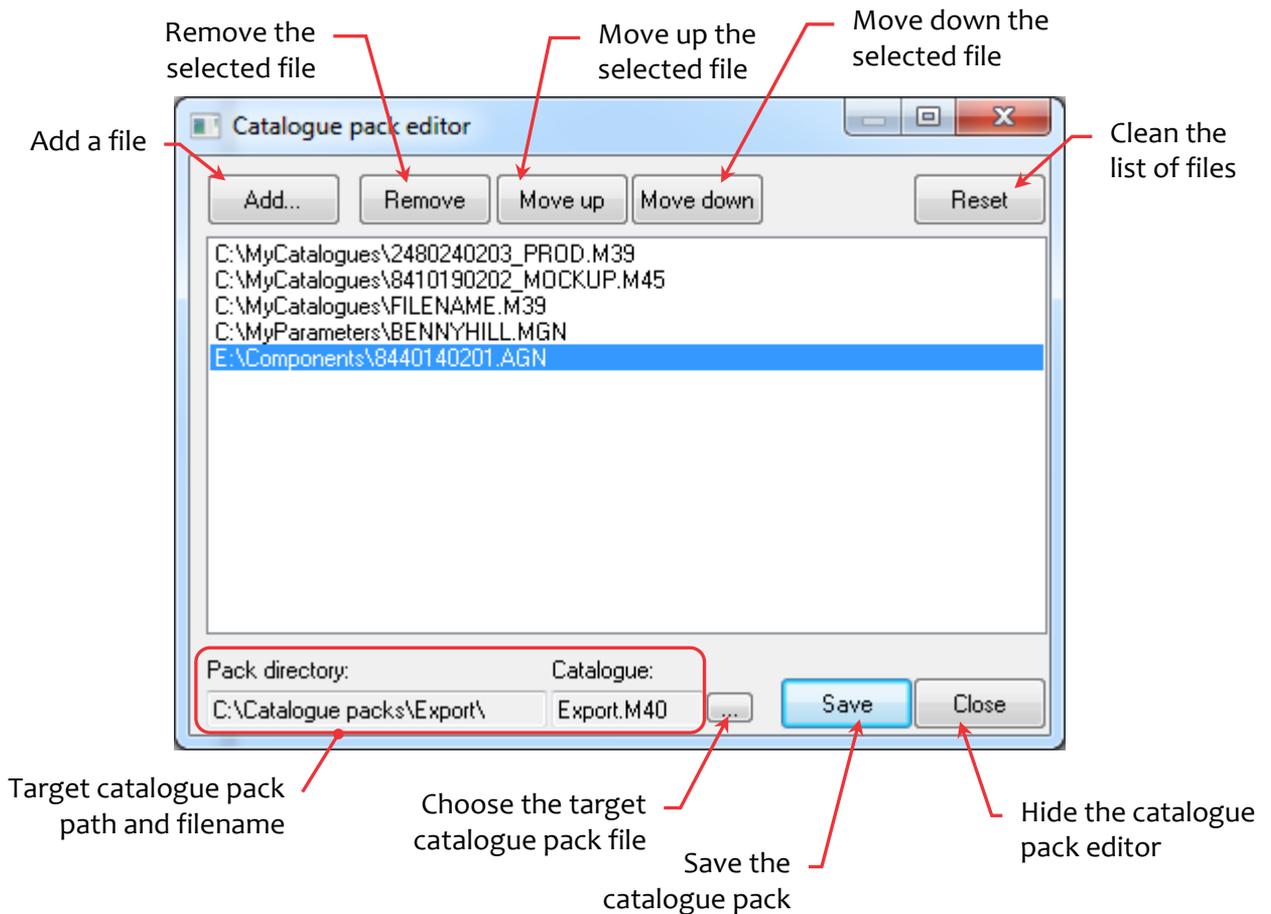


All selected files are added into the catalogue pack list.

### 6.11.2. Edit and create the catalogue pack

When you call the contextual menu (right-click on the local browser view), click on “**Catalogue pack**” > “**Create pack...**”, or hit the **Ctrl + F6** keys.

Here a window is displayed with the list of the catalogue pack files, previously added:



You can add, remove and move up or move down the files and catalogue files through this window. The “**Reset**” button clean all files of the catalogue pack.

When you click on the “**Save**” button, the catalogue pack is saved in accordance with the target catalogue pack file.

You can change the target catalogue pack file by clicking on the “...” button. You have to input a catalogue filename (without extension). A folder is created from this filename, in which all embedded files in catalogues and all files (of the catalogue pack list) will be copied.

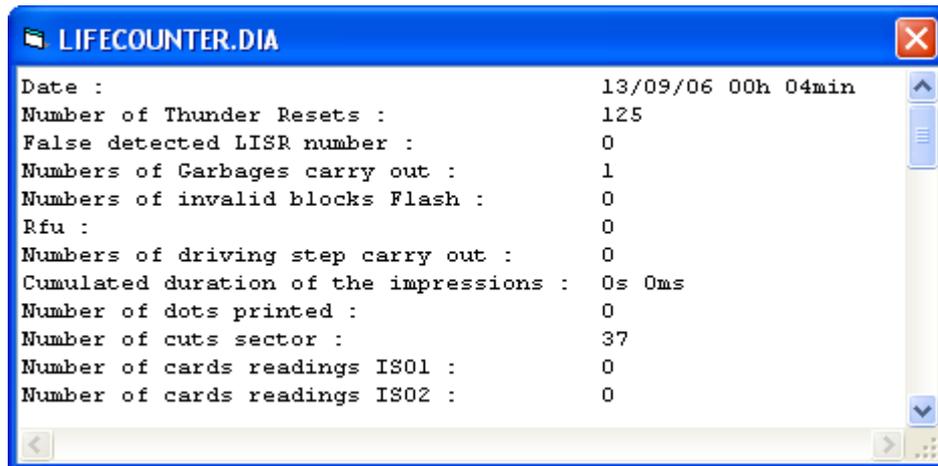
For example, if you input this catalogue pack filename: “MyPack” in the directory “C:\”, then a folder “C:\MyPack\” will be created, and the catalogue “C:\MyPack\MyPack.Mxx” will be generated. All files in the catalogue pack list will also be copied in the “C:\MyPack\” directory.

**Important:** If many files with the same filename are referenced in the catalogue pack list (embedded in a catalogue or directly), then files will be overwritten and the last referenced file will subsist. So, the **order of files in the catalogue pack list matters**.

## 7. Views of some files

### 7.1. File LIFECOUNTER.DIA

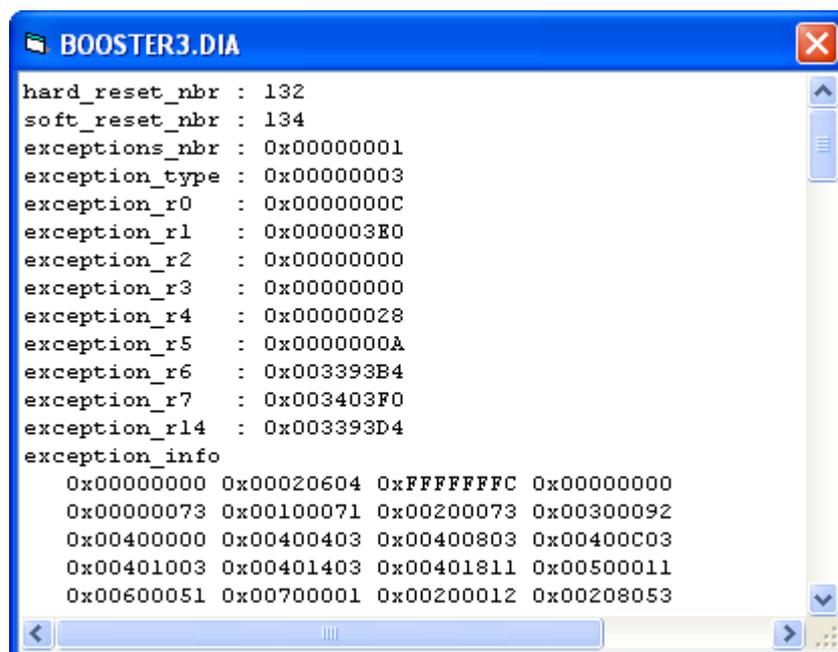
For view 'LifeCounter.dia' file, you must double-click on the file, and after the information of this file are displayed in a window.



```
Date : 13/09/06 00h 04min
Number of Thunder Resets : 125
False detected LISR number : 0
Numbers of Garbages carry out : 1
Numbers of invalid blocks Flash : 0
Rfu : 0
Numbers of driving step carry out : 0
Cumulated duration of the impressions : 0s 0ms
Number of dots printed : 0
Number of cuts sector : 37
Number of cards readings IS01 : 0
Number of cards readings IS02 : 0
```

### 7.2. File BOOSTER?.DIA

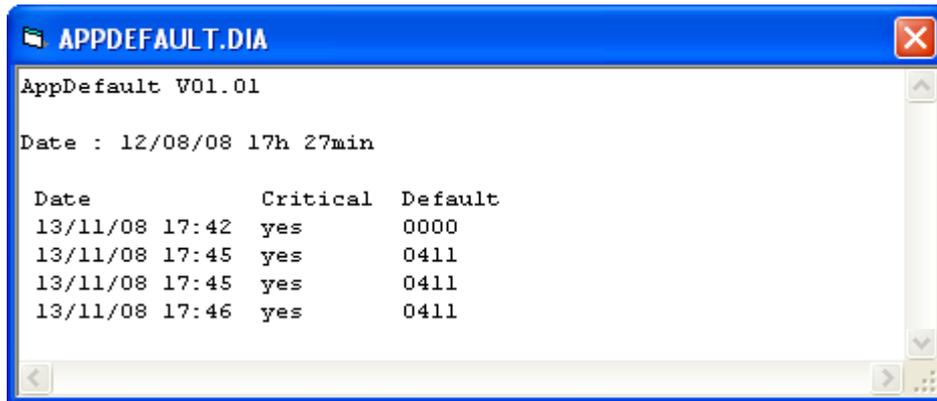
For view 'Booster?.dia' file, you must double-click on the file, and after the information of this file are displayed in a window.



```
hard_reset_nbr : 132
soft_reset_nbr : 134
exceptions_nbr : 0x00000001
exception_type : 0x00000003
exception_r0 : 0x0000000C
exception_r1 : 0x000003E0
exception_r2 : 0x00000000
exception_r3 : 0x00000000
exception_r4 : 0x00000028
exception_r5 : 0x0000000A
exception_r6 : 0x003393B4
exception_r7 : 0x003403F0
exception_r14 : 0x003393D4
exception_info
  0x00000000 0x00020604 0xFFFFFFFF 0x00000000
  0x00000073 0x00100071 0x00200073 0x00300092
  0x00400000 0x00400403 0x00400803 0x00400C03
  0x00401003 0x00401403 0x00401811 0x00500011
  0x00600051 0x00700001 0x00200012 0x00208053
```

### 7.3. File APPDEFAULT.DIA

For view 'AppDefault.dia' file, you must double-click on the file, and after the information of this file are displayed in a window.



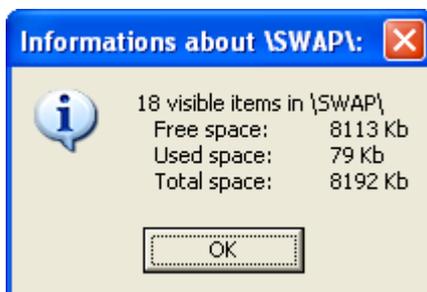
### 7.4. File APPCOUNTER.DIA

For view 'AppCounter.dia' file, you must double-click on the file, and after the information of this file are displayed in a window.



### 7.5. Files \*.SIZ

Files with the \*.SIZ extension are virtual files which indicate the total size ('DIRECTORY.SIZ') and the available capacity ('FREEDIR.SIZ') of the current directory. To view those information, you have to double-click on a \*.SIZ file.



## 8. LLT Setting

---

### 8.1. File LLT.INI

---

LLT configuration is given by the file “LLT.ini”.

#### [Options]

**RemoteDirectory** (default value: yes): displaying network disks.

**Certif\_SGN** (default value: no): displaying certificate for ‘\*.\*GN’ files.

**Auto\_bmk** (default value: no): automatic storage of last directory used (in ‘LLT.bmk’ file).

**EnumUSB** (default value: yes): automatic enumeration of terminals connected to PC using an USB link.

**Update\_bmk** (default value: yes): automatic update the list of favorite directories (from disks present).

**CptWaitEndOfActivity** (default value: 2, that’s to say 1 minute; minimum value: 1): deadline at the end of activity of the terminal after disconnection, by step of 30 seconds

#### [Environnement]

**ConfirmMockupCatDL** (default value: no): confirm to download a Mockup catalogue into the terminal

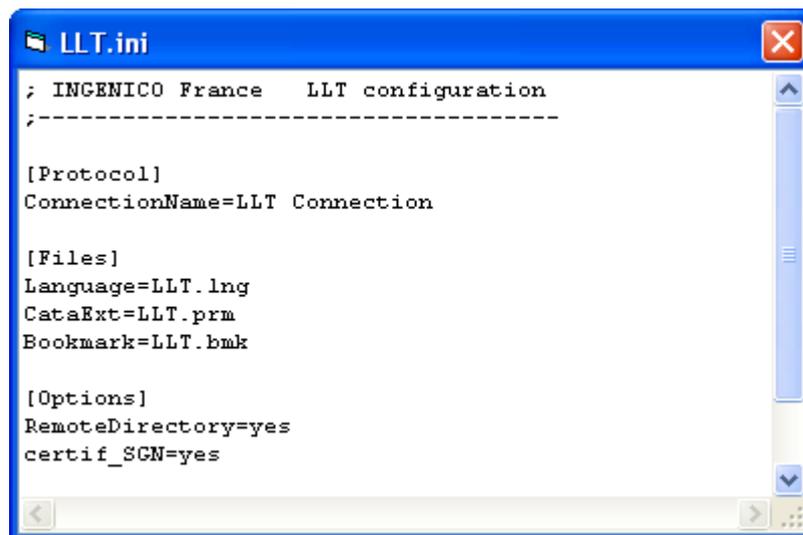
**ConfirmProdCatDL** (default value: no): confirm to download a Production catalogue into the terminal

**ConfirmOtherCatDL** (default value: no): confirm to download an undefined catalogue into the terminal

#### Note:

The **ConfirmMockupCatDL** and **ConfirmProdCatDL** parameters concern respectively catalogue filenames that contain “MOCKUP” and “PROD”.

LLT.ini example:



```
LLT.ini
; INGENICO France   LLT configuration
;-----

[Protocol]
ConnectionName=LLT Connection

[Files]
Language=LLT.lng
CataExt=LLT.prm
Bookmark=LLT.bmk

[Options]
RemoteDirectory=yes
certif_SGN=yes
```

## 8.2. File LLT.PRM

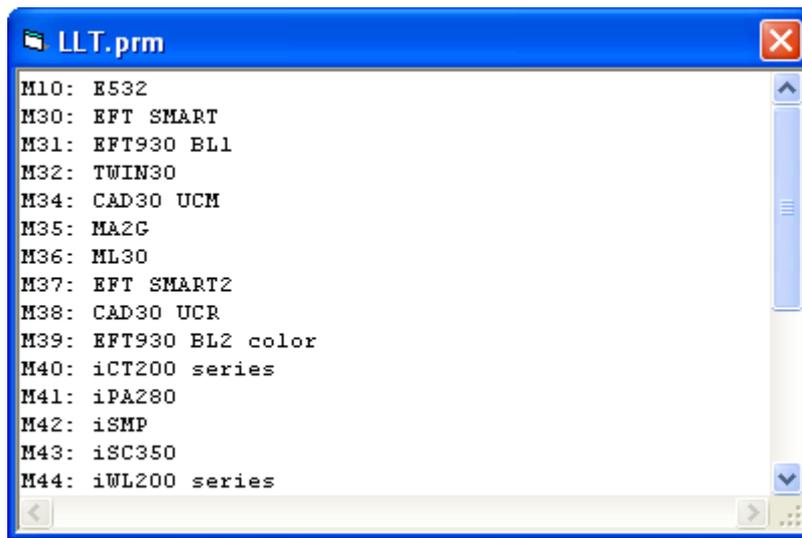
---

It allows the user to define all product code lists for EFT and the associated terminal description. This product code corresponds to catalogue files extension.

Syntax:

Mxy: product description

Example:

A screenshot of a text editor window titled "LLT.prm". The window contains a list of product codes and their descriptions, each on a new line. The list starts with "M10: E532" and ends with "M44: iWL200 series". The text is in a monospaced font. The window has a blue title bar and standard Windows window controls (minimize, maximize, close) in the top right corner. A vertical scrollbar is visible on the right side of the text area.

```
M10: E532
M30: EFT SMART
M31: EFT930 BL1
M32: TWIN30
M34: CAD30 UCM
M35: MA2G
M36: ML30
M37: EFT SMART2
M38: CAD30 UCR
M39: EFT930 BL2 color
M40: iCT200 series
M41: iPA280
M42: iSMP
M43: iSC350
M44: iWL200 series
```

## 8.3. File LLT.LNG

---

It contains the list of messages to be displayed by LLT. These messages are written in 2 different languages: English (by default) and French.

You can change the language used in LLT by changing the value "DefaultLanguage=2" in the "[General]" section.

## 8.4. File LLT.BMK

---

It contains the list of the favorite directories that the user can access in one click from LLT. The user can write the directories to be accessed easily in it. To update this file: see '[Direct access to a directory of the computer](#)'.

## 8.5. LLT used in command mode

---

### 8.5.1. Actions

- c = downloading the files listed in catalogue file
- u = uploading the files listed in catalogue file
- d = deleting the files listed in catalogue file

### 8.5.2. Switches

- r = filename where is stored the resulting code (if omitted, return code will be stored in « ResBatch.txt » in the LLT installation directory)
- e = name of the directory in the terminal where are downloaded the files contained in catalogue file (downloading mode) or from where are uploaded the files contained in catalogue file (uploading mode) or where are deleted the files contained in catalogue file (deleting mode) (if omitted, swap disk)
- a = number of activity (if omitted, 1) (1=downloading, 2=diagnostic, 3=maintenance)
- x = number of serial port (if omitted, last port used by LLT)
- n = without dialog box displayed

### 8.5.3. Syntax

- Downloading:  
LLT.EXE -c<path and catalogue file name> -r<path and result file name> -a<N° of activity>  
-e<name of the directory in terminal where are downloaded the files>  
-x<N° of serial port>
- Uploading:  
LLT.EXE -u<path and catalogue file name> -r<path and result file name> -a<N° of activity>  
-e<name of the directory in terminal from where are uploaded the files>  
-x<N° of serial port>
- Deleting:  
LLT.EXE -d<path and catalogue file name> -r<path and result file name> -a<N° of activity>  
-e<name of the directory in terminal where are deleted the files>  
-x<N° of serial port>

#### 8.5.4. Return codes

The downloading return code is numerical ASCII coded in the resulting file followed by a text.

- "0": OK
- "-1": missing parameter
- "-2": catalogue file access problem
- "-3": resulting file access problem
- "-4": downloadable files access problem
- "-5": LLT already running
- "-6": LLT configuring file missing (LLT.INI, LLT.LNG, LLT.PRM)
- "-7": connection name ("LLT Connection") not found in Windows RAS.
- "-8": PPP connection problem (RAS error + error number)
- "-9": FTP connection problem
- "-10": FTP error during file transfer
- "-11": terminal not responding once PPP connection has been established
- "-12": LLT cannot be run on such Windows platform
- "-13": LLT identification not recognized by the terminal
- "-14": unauthorized activity
- "-15": activity badly finished
- "-17": can not download a file with diagnostic activity
- "-18": can not found the RAS phonebook
- "-19": COM port unknown
- "-20": catalog file not adapted for this terminal

### 8.5.5. Examples

Catalogue file name: 31140210.M30

With values:

```
; Download files to SWAP
31140210.ADF
31140210.SGN
; Change destination directory and download a file
-eHOST
Param.txt
```

Commande file : LoadingTest.bat

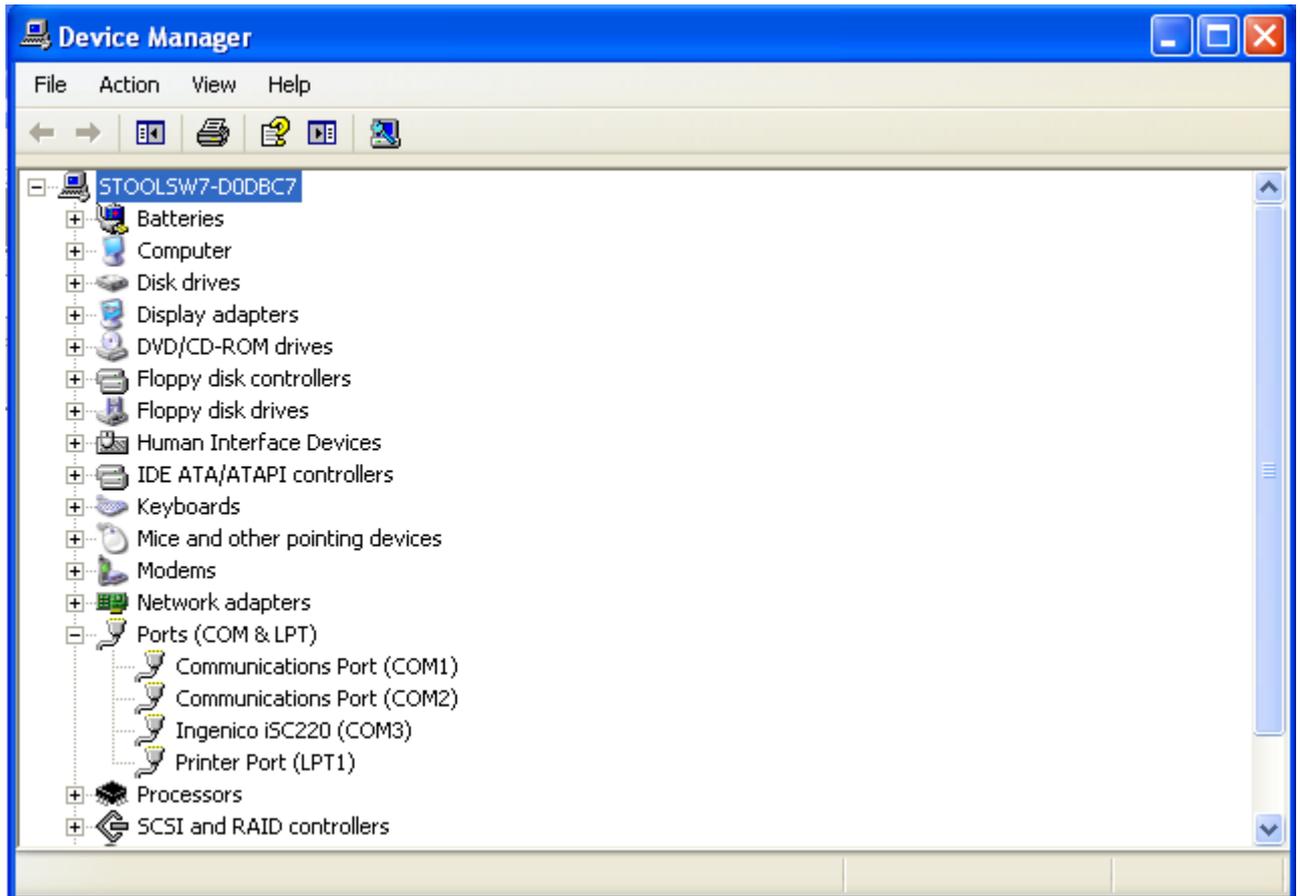
With values:

```
@echo off
set PATH=C:\Program Files\TELIUM Tools\LLT
set NB=1
set /P PORT=Enter COM port number or [ENTER] for COM%NB% :
if .%PORT%. == .. goto Label0
set NB=%PORT%
:Label0
echo Enter LLT Tools install directory or [ENTER] for
set /p LLT_TOOLS= "%PATH%" :
if .%LLT_TOOLS%. == .. goto Label1
set PATH=%LLT_TOOLS%
:Label1
set LLT="%PATH%\LLT.EXE"
echo Launch LLT Tools on the terminal
set /p T=When "LLT" displayed, press a key to continue...
echo Catalogue loading in progress ...
%LLT% -c31140210.M30 -eSWAP -a1 -x%NB%
echo Loading is finished.
set /p T=Press a key to continue...
```

## 8.6. Displaying the USB connection port number

Display the 'Device Manager' panel with the LLT menu: **Connection** → **Device manager** (or with Windows menu: **Start** → **Control Panel** → **Device Manager**).

The list of USB ports used can be updated with the menu: **Action** → **Scan for hardware changes**.



## 9. Connection Configuration with terminal

The connection configuration is quite similar on the operating systems Microsoft® Windows® XP, Vista and Seven.

### 9.1. USB driver use

The Telium USB Microsoft driver is automatically installed during the LLT installation. The connected terminals use it by default.

If the optional Jungo driver is also installed, and if the connected Telium terminal is compliant with, then the Jungo driver will be automatically used for this connection (instead of the Microsoft one).

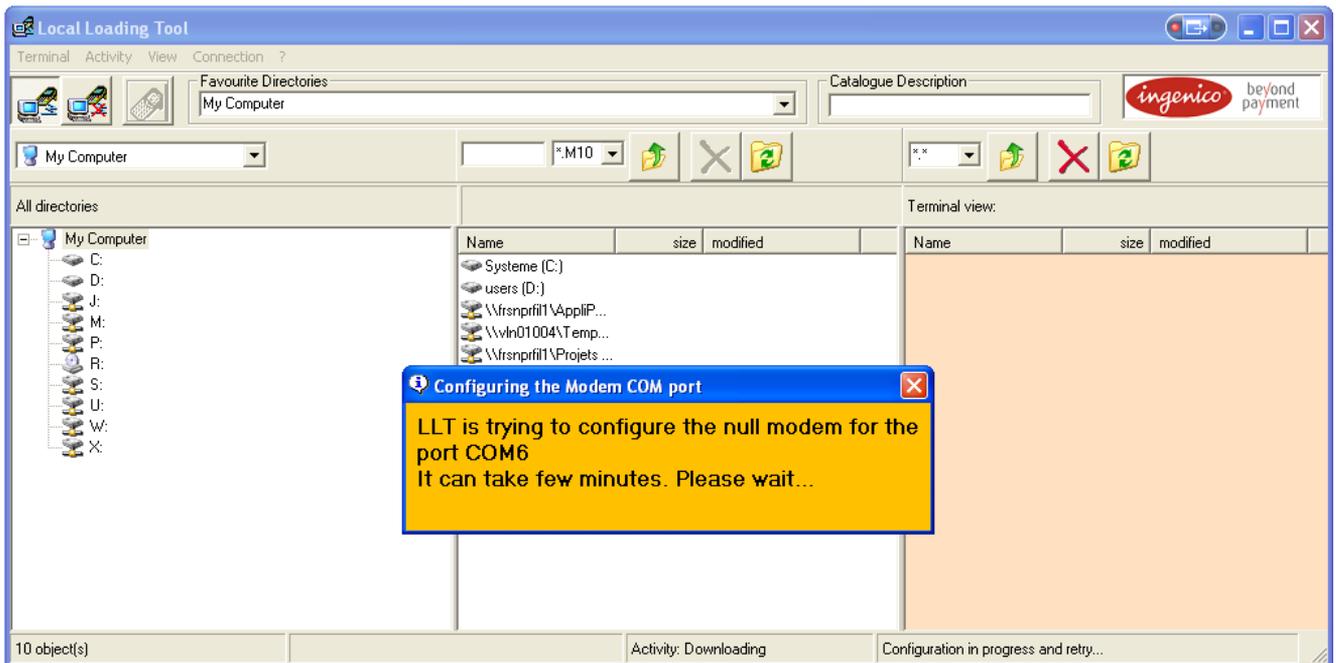
Connect an USB cable between the terminal (USB Slave) and the PC (USB Host).

A new hardware is automatically detected by Windows® and the terminal is added in the list of USB connection port number (see [Displaying the USB connection port number](#)).

### 9.2. Null modem COM port configuration

#### 9.2.1. Connection with USB interface

With an USB connection, the LLT can automatically configure the connected null modem on the corresponding COM port. This can be launched on a connection attempt to the terminal, if it's needed:



This automatic configuration drives the Modem wizard of Windows® (in background) through all needed steps. On all Windows® OS, the administrator privileges are required to use this feature properly.

However in case of failure of the automatic configuration, this operation remains to be manually done (see explanations below for [Connection with serial interface](#)).

## 9.2.2. Connection with serial interface

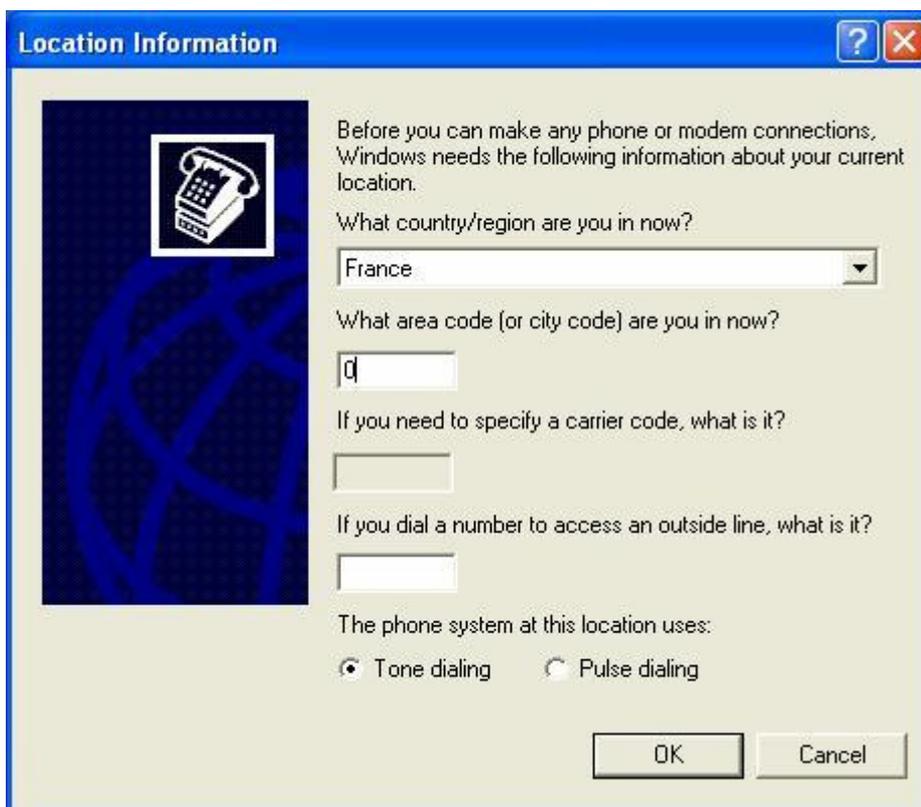
To be connected to a terminal a serial cable must be used. For that configure the PC by installing the null modem driver and determine the serial port that will be used with this connection.

### 9.2.2.1. Installing the null modem driver

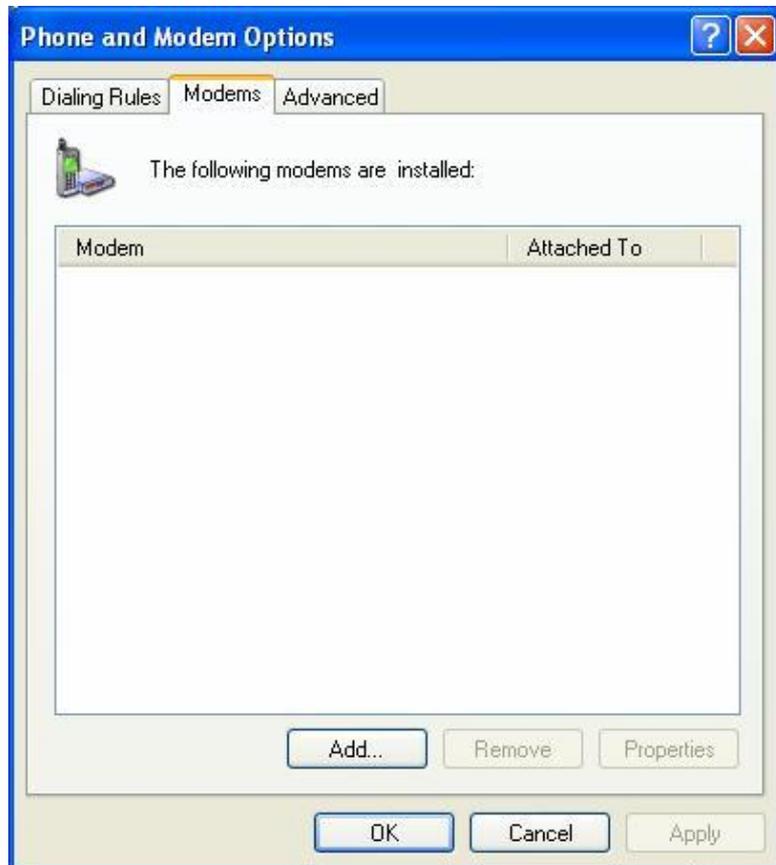
Configure the serial interface with the LLT menu: **Connection** → **Serial interface properties ...**

Note: for connection with serial interface, the PC must be restarted after the null modem is installed.

If no modem has been installed on this computer, the following screen appears:



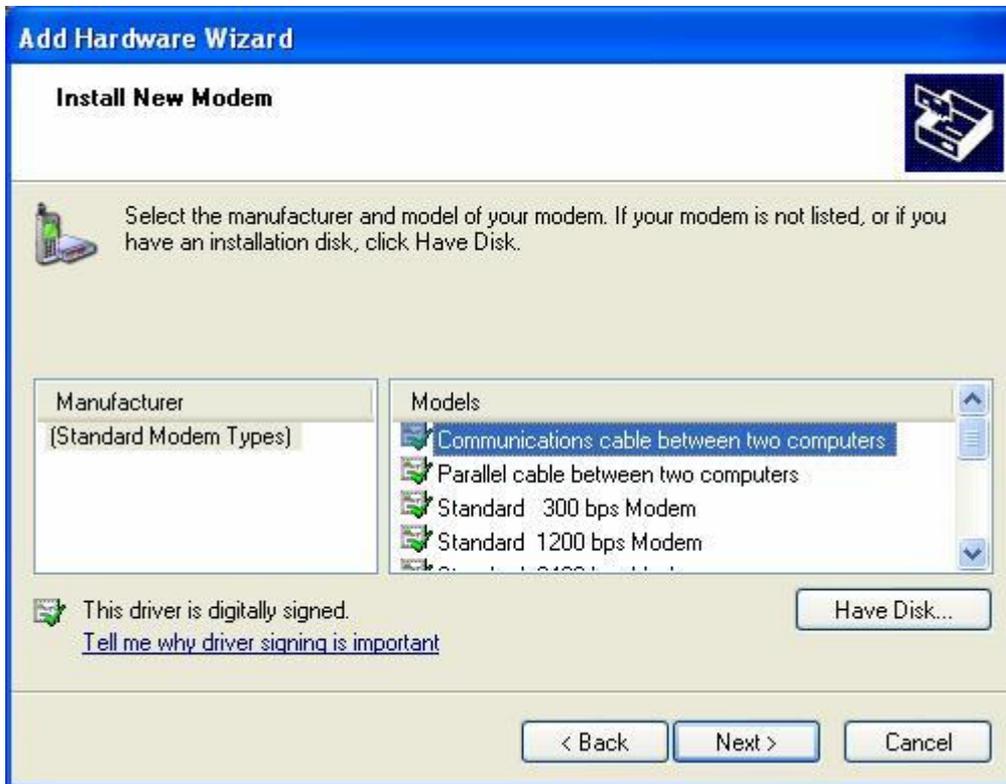
Key in any value for your area code, and then close the window by button **OK**.



Click **"Add"** button to install the null modem driver.

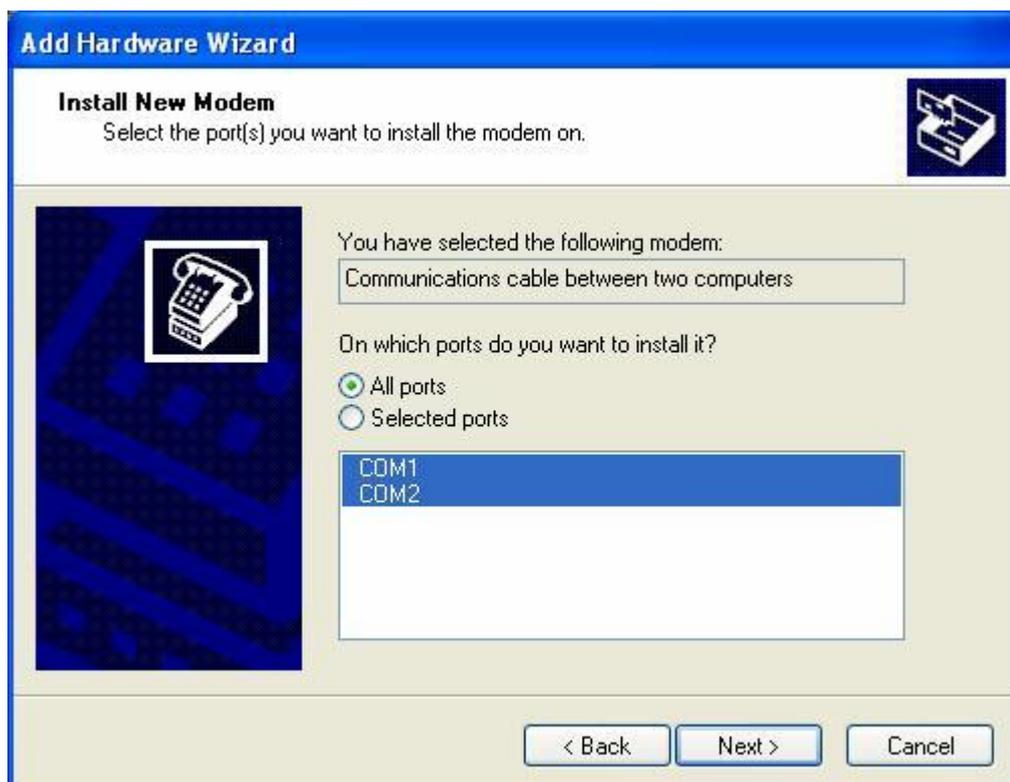


Check the option **"Don't detect my modem; I will select it from a list"** and then click **"Next"** button to select the null modem driver from a list.



Select “(Standards Modem Types)” from the list “Manufacturer” and “Communications cable between two computers” from the list “Models”.

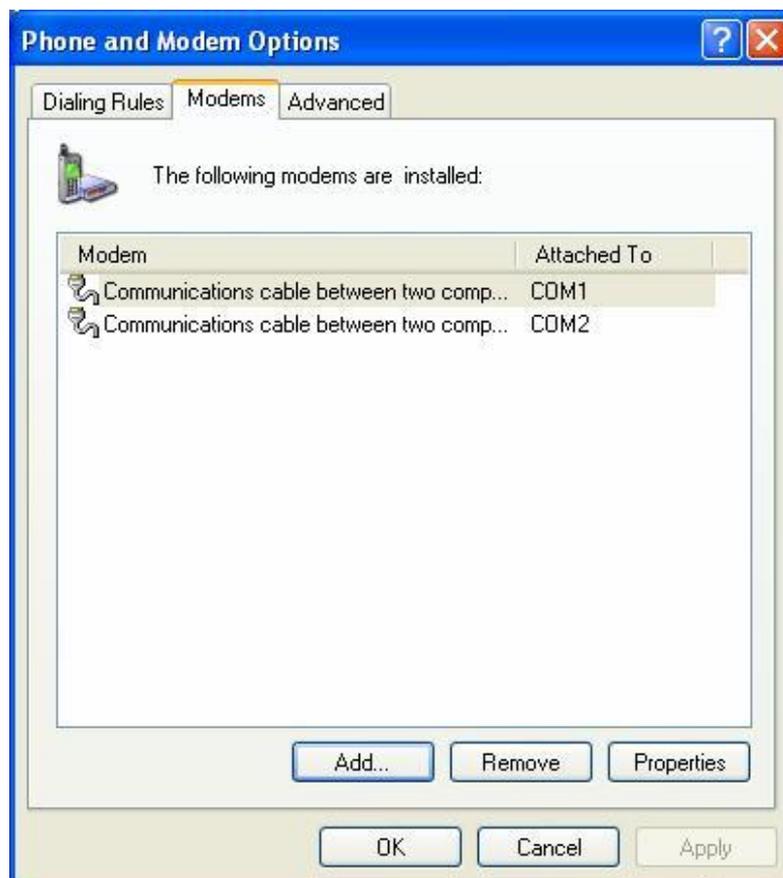
Then click “Next” button to select the serial port that will be used for the connection.



Select a specific port or ‘All ports’ if you want to be able to use either one or the other. Continue by clicking “Next” button.



and click "Finish".  
The new interface appears now from the list.



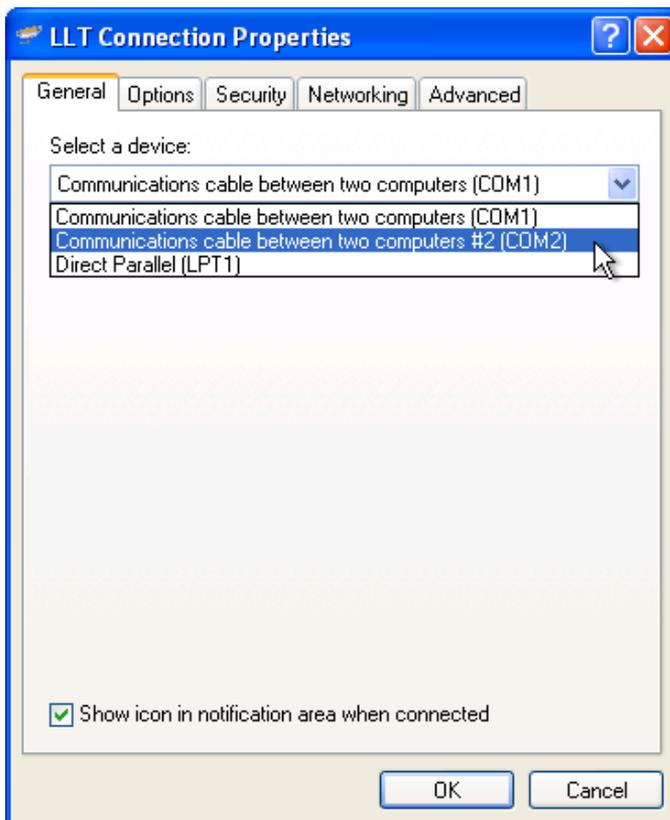
Click "OK" to validate these settings.

### 9.2.2.2. Use of another serial port

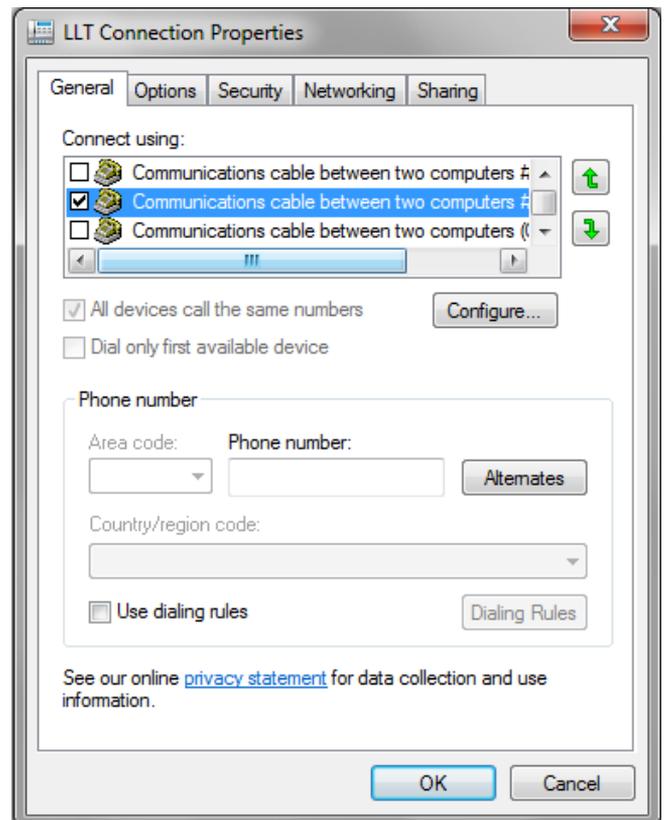
It is possible to define several serial ports in order to select later the available port (See chapter [Selecting communication port](#)). To define a new interface and a new serial port (for example using COM2), repeat the previous step described in [Installing the null modem driver](#).

### 9.2.3. Selecting communication port

Select the serial port used from ‘**Connection → Connection configuration ...**’ LLT menu.  
Select the port to use in the device list.



Under Windows® XP



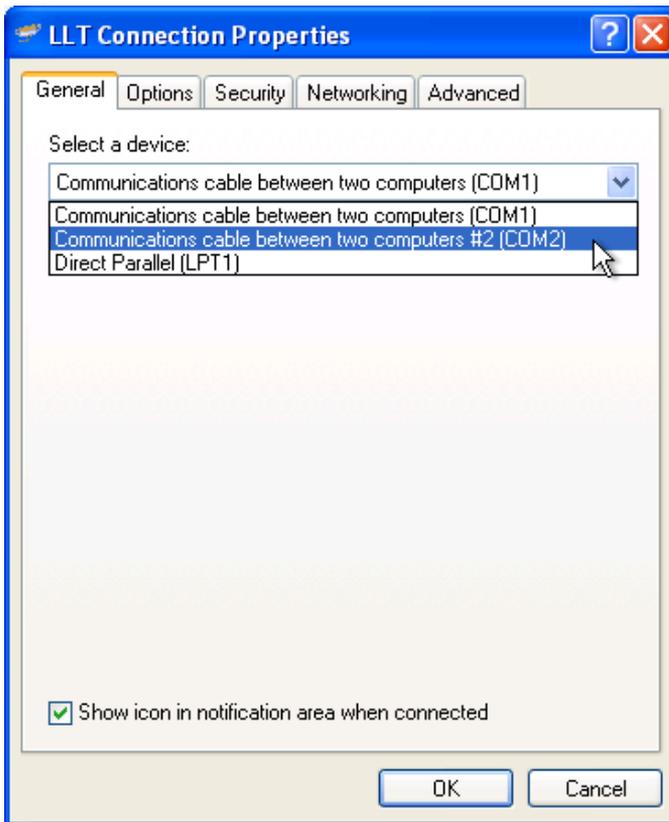
Under Windows® Vista et 7

If the serial port is not displayed in the device list, check if it has correctly defined (see chapter [Installing the null modem driver](#)).

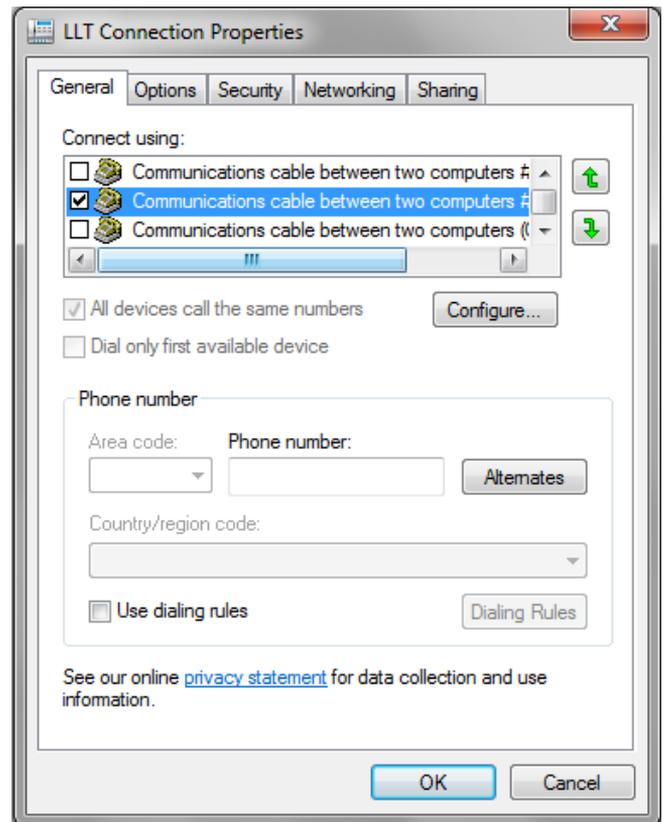
Before using LLT application check that LLT cable is correctly plugged into the right serial connector.

### 9.2.4. Communication port configuration

Used communication port configuration is made from LLT menu: **Connection** → **Connection configuration...**

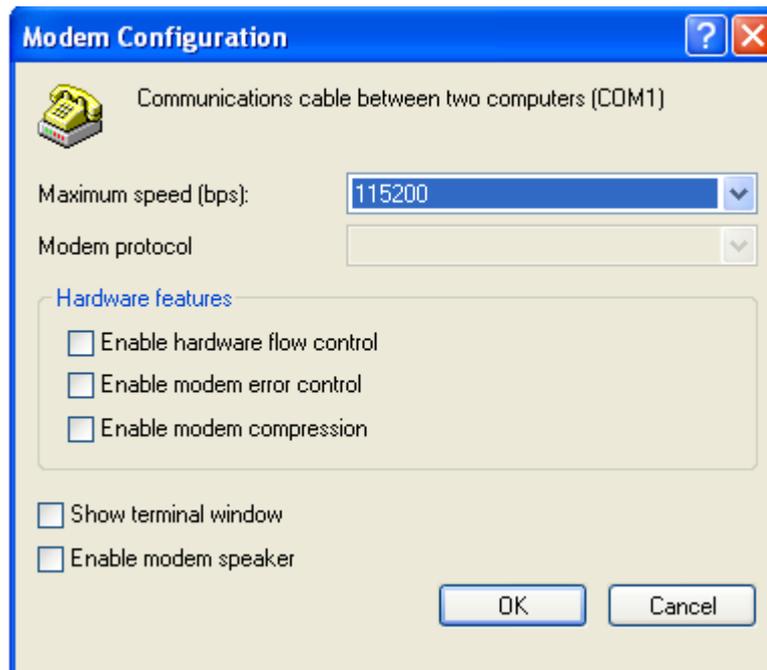


Under Windows® XP



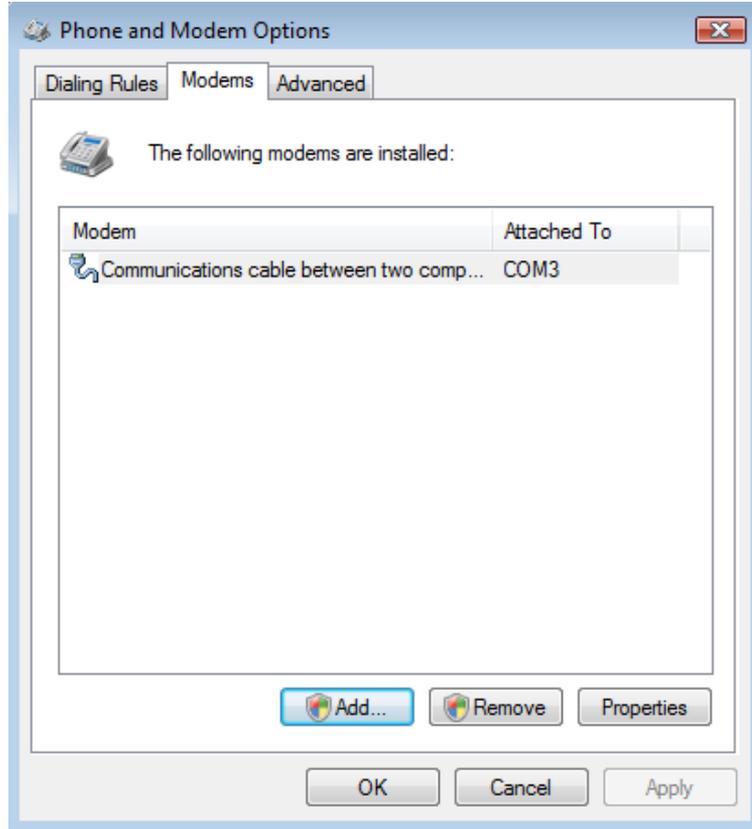
Under Windows® Vista et 7

Click “Configure...”

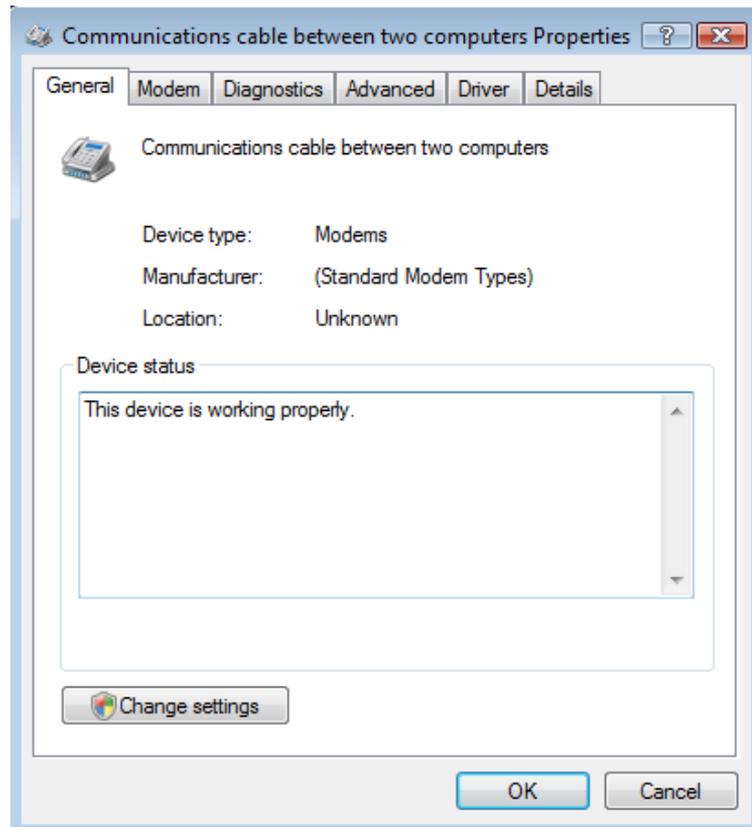


Then choose initial speed: **115200** and **disable hardware flow control**.  
Click “OK” in the different opened windows to validate these settings.

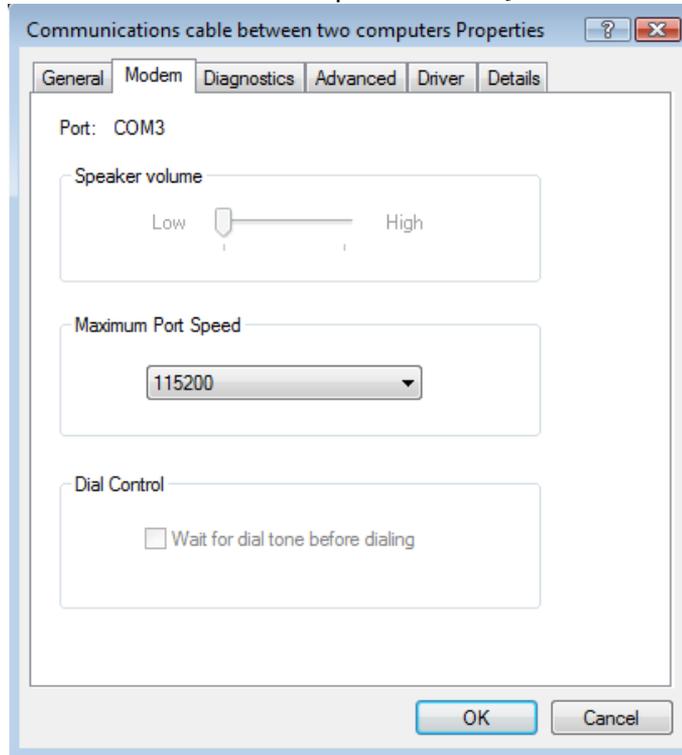
Then, go to the LLT menu: **‘Connection → Serial interface properties ...’**



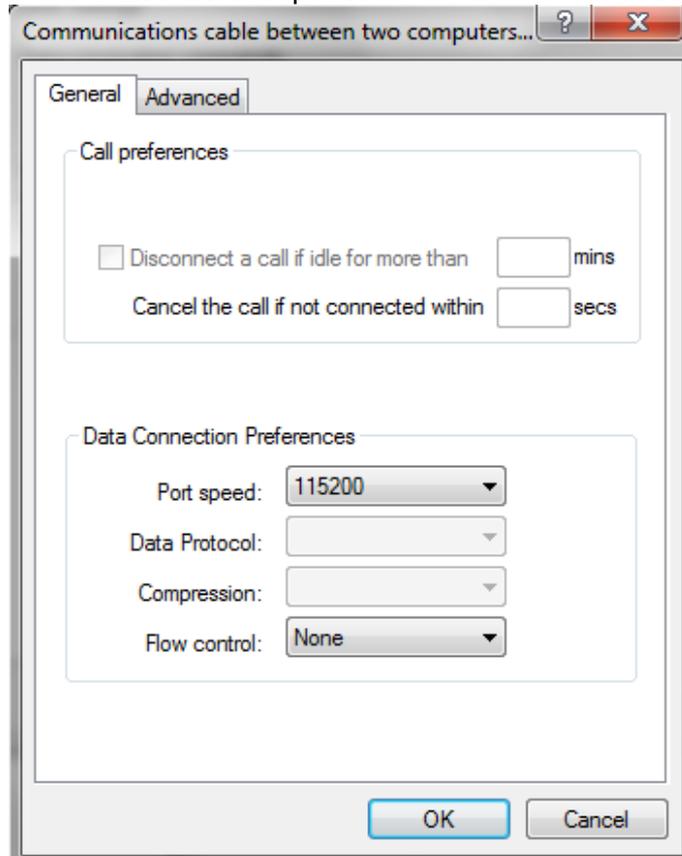
Select the port and click **“Properties”**.



Select 'Modem' panel, and choose 'Maximum Port Speed' value **115200**:



Select '**Advanced**' panel, then '**Change Default Preference...**', and verify "Port speed" (115200) and "Flow control" (None). Then, click OK in the different opened windows to valid these settings:



**WARNING:** The PC must be restarted when using the serial port interface.

## 10. Appendices

### 10.1. List of short cut keys

Each LLT function is accessible via the menu and is also accessible via a keyboard function key or a combination of these keys.

Function	Shortcut
Consult the User Guide	F1
Files downloading	F2
Files uploading	CTRL + F2
Connect to terminal	F4
Disconnect from terminal	CTRL + F4
Refresh the view contents	F5
Add to the catalogue pack list	F6
Create the catalogue pack	CTRL + F6
Reset the catalogue pack list	CTRL + SHIFT + F6
Creating a catalogue file from an existing one	F7
Creating a family	F8
Consult a catalogue file	F9
Open a file or a directory	Return
Delete some files from the view	Del
Select the favorite directory list	SHIFT + F
Add a directory to the favorite directory list	SHIFT + Ins
Delete a directory from the favorite directory list	SHIFT + Del
Select all the files	CTRL + A
Go back to the parent directory	CTRL + B
Copy file list from the view to clipboard	CTRL + C
Display the list of modules present in the terminal	CTRL + F
Terminal Information	CTRL + I
Terminal Configuration	CTRL + J
PC view is active view	CTRL + K
Exit from LLT	CTRL + Q

### 10.2. List of icons and their function

For each view an icon bar allows the user to access to some functions.

Use  icon or **Del** key or popup menu to delete selected file(s) from the current view and from the corresponding directory (Note: Such function can be unauthorized on the terminal). When you delete a catalogue file, the software deletes associated files, only if they are not used by other files.

Use  icon or **F5** key refresh view contents.

Use  icon or **CTRL+B** key navigate and view the parent directory.

## 10.3. Problems and Solutions

Some errors are classified by code, their description is given below in order to check potential problems.

Error number	error	What to do?
Ras 602	The port is already open.	The serial port used by LLT is already used by another application.
Ras 624	RasPhone2000.pbk	First locate the Rasphone2000.pbk file (file located in the RAS subdirectory of the LLT directory application) and make sure that the read-only file property in the Properties dialog box is not selected.
Ras 629	The port was disconnected by the remote machine.	Check that hardware flow control is still disabled on LLT or check that terminal is waiting for connection.
Ras 633	The remote computer is in used	Check USB port is present in the list of <a href="#">USB connection port number</a> or check if the USB cable is connected to the USB port declared on PC.
Ras 638	The remote server does not response	On a laptop, turn off the modem if present.
Ras 721	The remote computer did not respond.	The plugged port COMx is not selected. See chapter <a href="#">Selecting communication port</a> or see chapter <a href="#">Installing the null modem driver</a> to define the used serial interface.
Ras 651 or Ras 777	Your connecting device has reported an error.	Terminal is not responding. Check connection (check the serial cable or USB cable is correctly plugged) and check that terminal is waiting for a connection. If not check <a href="#">Selecting communication port</a> or <a href="#">Installing the null modem driver</a> .
FTP 12002	Internet connected	Stop the Wifi connection on the PC.
FTP 12163	Internet disconnected	In web browser delete check from the Property "working off-line"
	LLT displays "PPP Connected" then automatically disconnecting	LLT uses port IP 6000 for data exchange. Check that the use of this port is not forbidden by the network administration (Firewall, Virtual Private Network (VPN)) or check the port is not used by another application.
	LLT displays "Absence of terminal answer"	LLT uses port IP 6000 for data exchange. Check that the use of this port (or the LLT application) is not forbidden by the network administration (Firewall, Virtual Private Network (VPN)) or check the port is not used by another application.
Run-time error '10048'	Address in used	Verify that the IP address and IP port used by the LLT are not used by another application.

## 10.4. Known limitations

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These following behaviours could happen:

Description	Workaround
When LLT is connected to the terminal, the web browser (Internet Explorer and Google Chrome) are unable to connect to Internet.	If this situation occurs, you have to disconnect LLT to continue web browsing.
In some cases, on the terminal connection, Windows doesn't recognize correctly the COM port number. After a COM port number change, the COM port is sometimes not refreshed on the LLT side.	Those incoherencies should not disturb the use of the LLT: the connection with the terminal remains possible.