User's Guide

Local Loading Tool (LLT)

For TELIUM™ Terminals

Ingenico - 190-192 avenue Charles de Gaulle - 92200 Neuilly-sur-Seine
Tél. 33(0)1 46 25 82 00 - Fax 33 (0)1 47 72 56 95 - ingenico@.ingenico.com

Copyright © 2012 Ingenico
All rights reserved

Copyright © 2012 Ingenico
All rights reserved

CONTENTS

1. **Introduction** 5

2. **Environment** 5

3. **Software installation** 5

4. **Software removal** 6

5. **Running the LLT** 7

6. **Use of LLT functions** 8

   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

7. **Views of some files** 24

   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

Copyright © 2012 Ingenico
All rights reserved

8. LLT Setting 26

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

9. Connection Configuration with terminal 32

9.1. USB driver use 32

9.2. Null modem COM port configuration 32

10. Appendices 41

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

Copyright © 2012 Ingenico
All rights reserved

1. Introduction

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)

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

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.

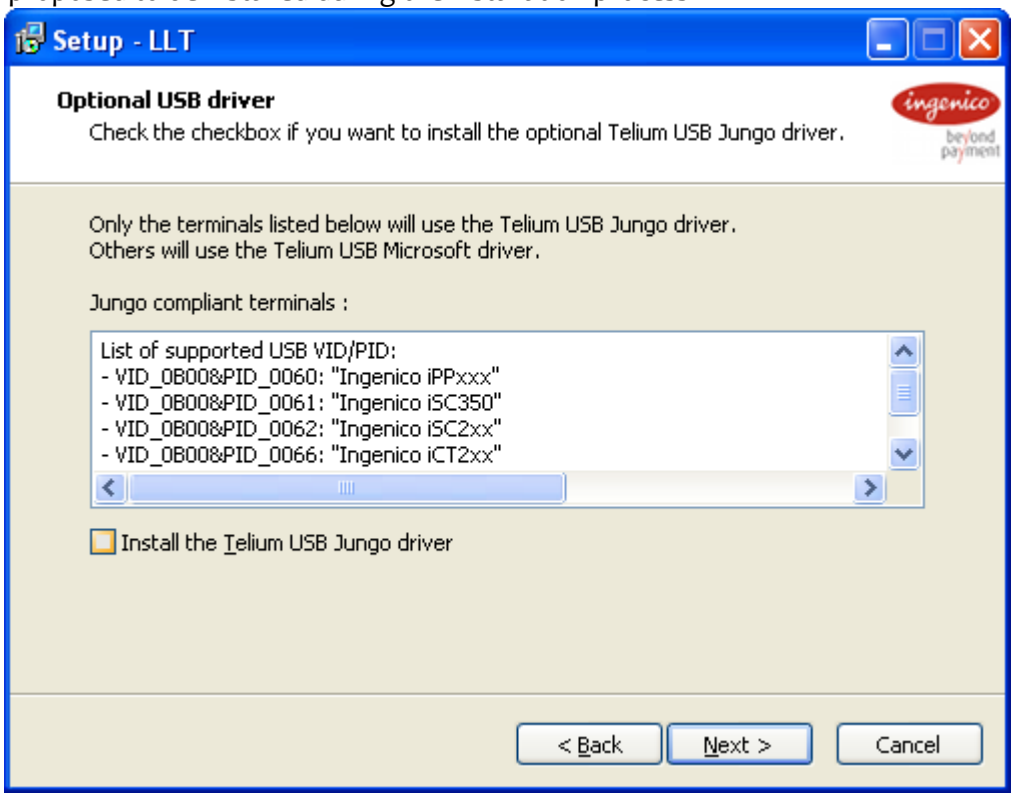
If your PC doesn't run the setup automatically, click "**Start**" button from the task bar, choose "**Run ...**", then "**Browse ...**" CD drive and select "**LLT_setup.exe**".

Copyright © 2012 Ingenico
All rights reserved

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:

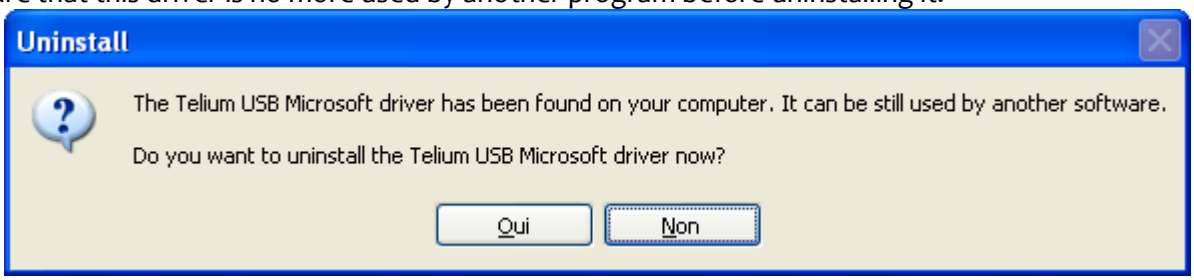


Once you have completed the setup procedure, you can launch the LLT by double-clicking on the LLT icon or from **Start** button Choose: ***Programs -> TELIUM Tools -> LLT xx.yy -> LLT xx.yy*** **(where xx, yy are major and minor version number).**

4. Software removal

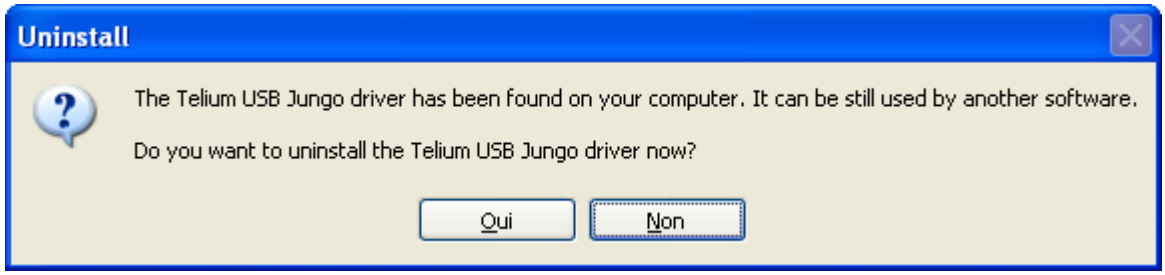
From task bar click **Start** and choose ***Programs -> TELIUM Tools -> LLT xx.yy -> LLTxx.yy Uninstall.***

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.



Copyright © 2012 Ingenico
All rights reserved

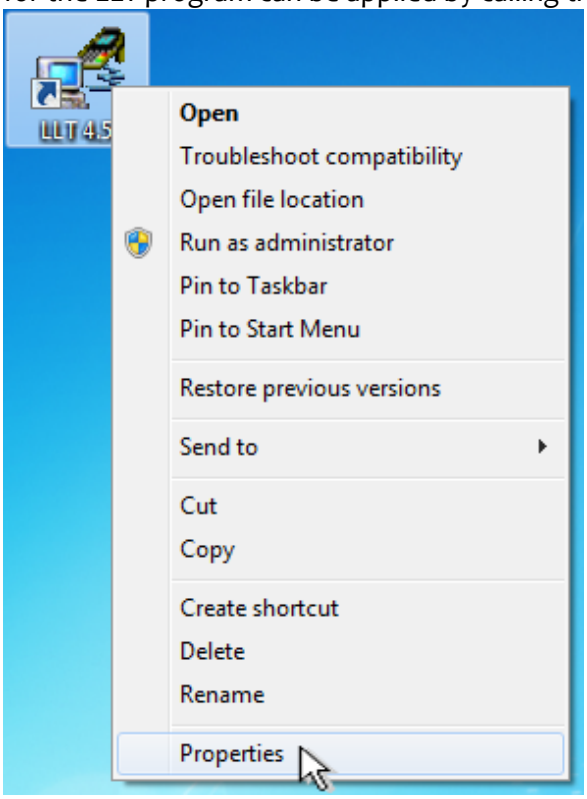
In case you have installed the optional USB Jungo driver with LLT, the uninstall process propose you to uninstall it in the same time:



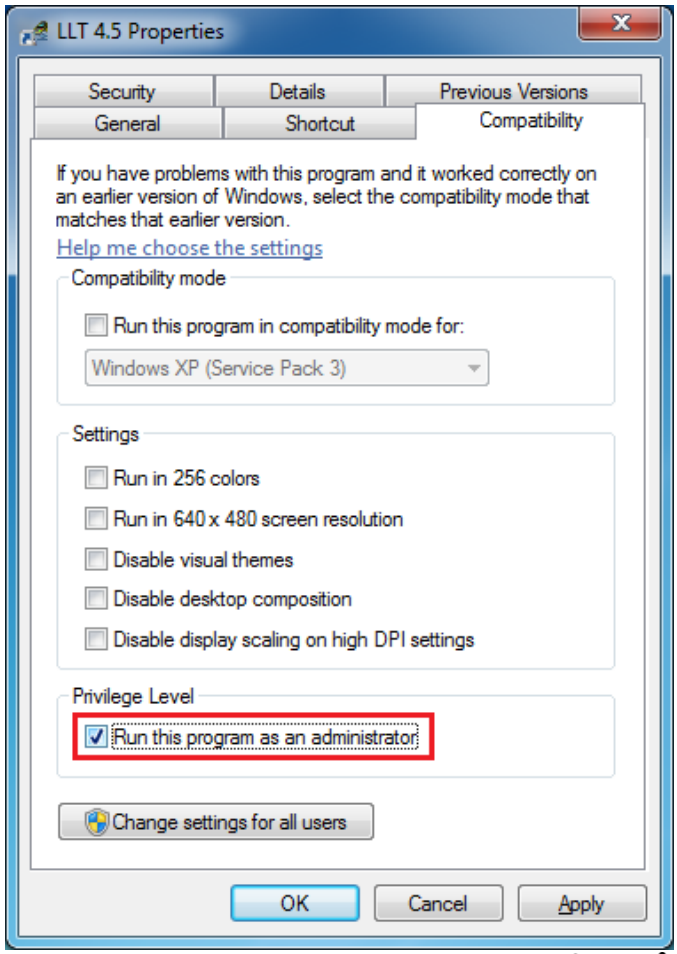
5. Running the LLT

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:**



Copyright © 2012 Ingenico
All rights reserved

6. Use of LLT functions

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:

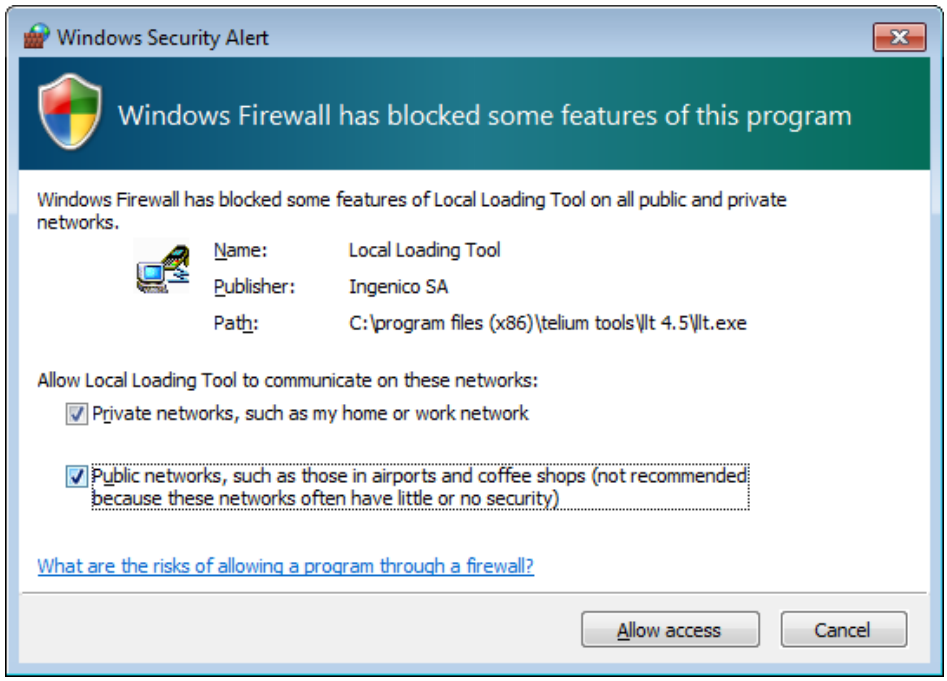
- with mouse: by clicking on the icon
- with the LLT menu: ***Terminal → Connection***
- with shortcut key: **F4**

Copyright © 2012 Ingenico
All rights reserved

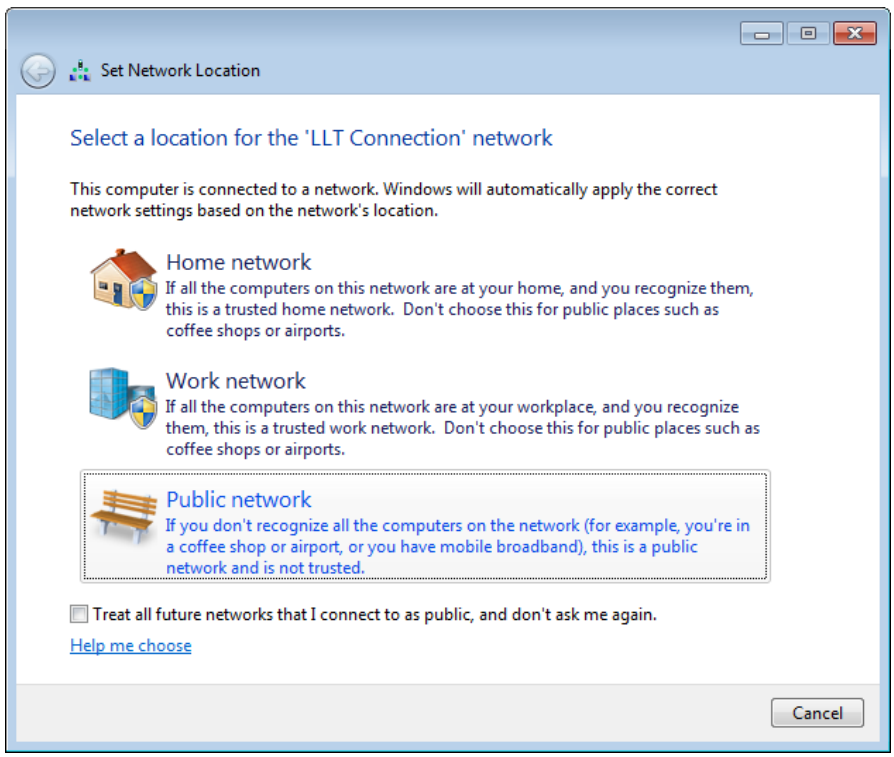
Warning: When you try to connect LLT with the terminal for the first time, you probably have the following screen displayed on your screen (especially with the firewall of Windows® Vista or 7).

Under Windows® 7

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



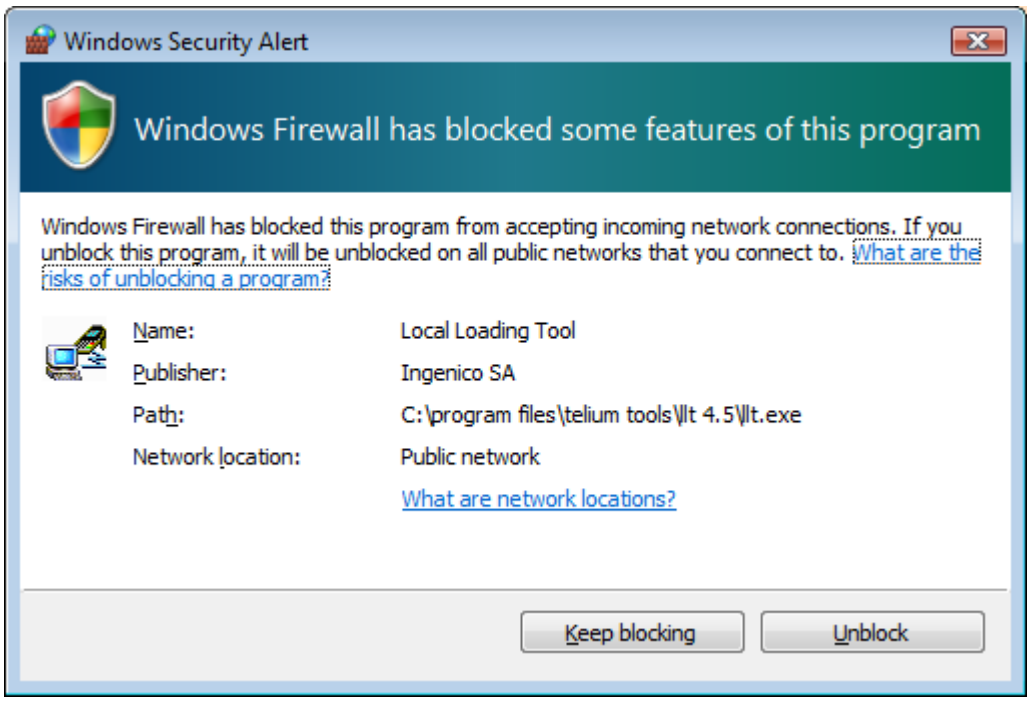
Then, you could also have this following screen. Choose **"Public network"** again:



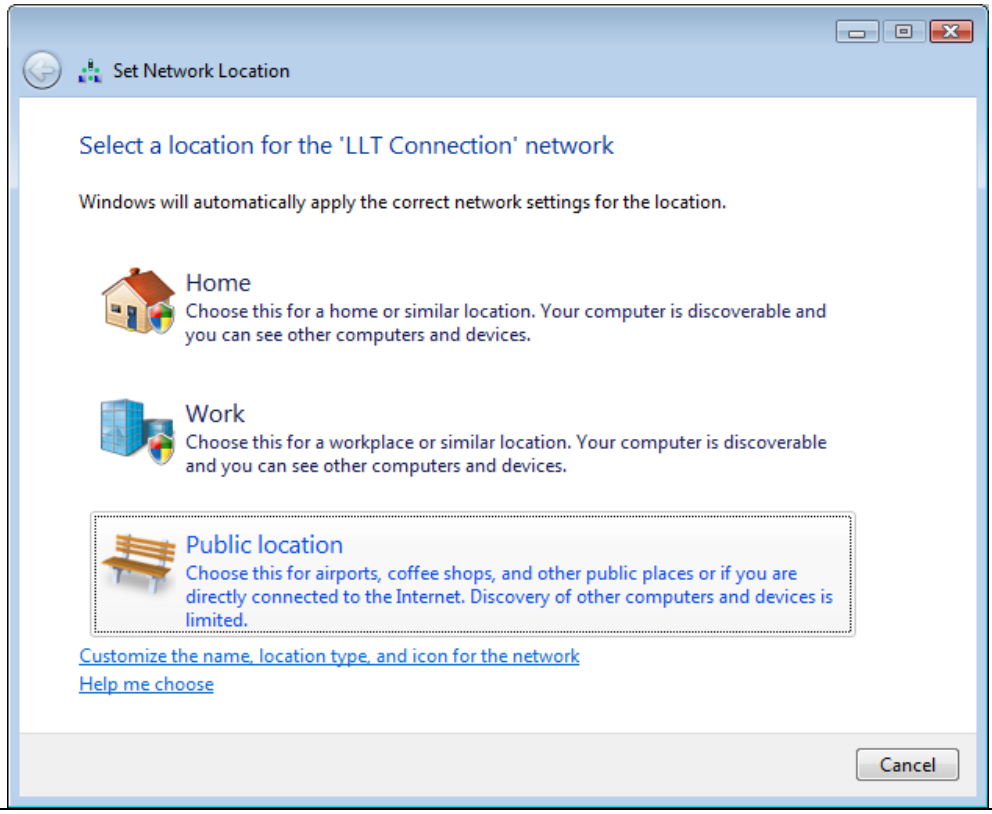
Copyright © 2012 Ingenico
All rights reserved

Under Windows® Vista

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.

Copyright © 2012 Ingenico
All rights reserved

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 then 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)

Copyright © 2012 Ingenico
All rights reserved

→ 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

- 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

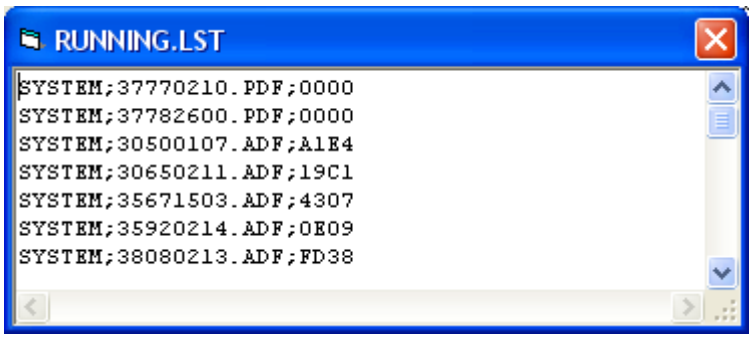
You can download a parameter file usable by an application in the **HOST** directory of the terminal.
Note: the application using this parameter file will have to delete it after using.

- 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.

Copyright © 2012 Ingenico
All rights reserved



6.7. Uploading diagnostic files (*.DIA)

- 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)

Copyright © 2012 Ingenico
All rights reserved

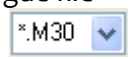
6.8. File selection and transfer

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.

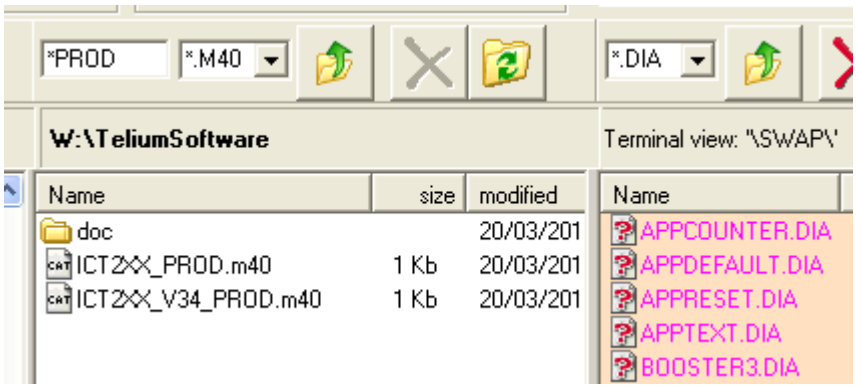
Warning: The '<requirements>' tags are not supported. All files associated with the terminal product type and with the '<application>' tag and files with the '<data>' tag are downloaded.

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.

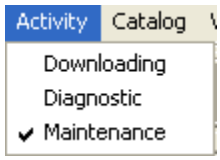
Copyright © 2012 Ingenico
All rights reserved

6.8.3. File transfer

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

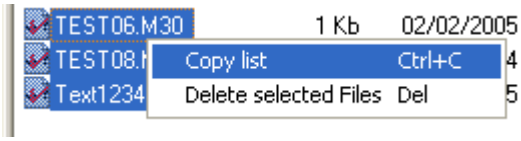
- with the menu: ***Terminal → File downloading*** or ***Terminal → File uploading***
- with mouse: drag and drop (from the source window to destination window).
- with shortcut keys: **F2** or **CTRL + F2**

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

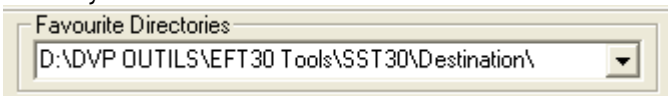
You can copy the list of selected file from the current view to the clipboard with the popup menu or with the **CTRL + C** keys.



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.

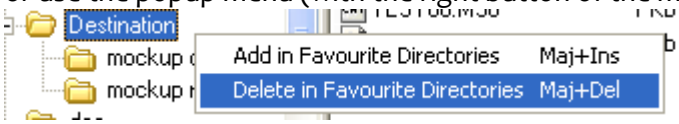


To **add** a path in the list selects a directory in the tree view:

- 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).



Copyright © 2012 Ingenico
All rights reserved

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.

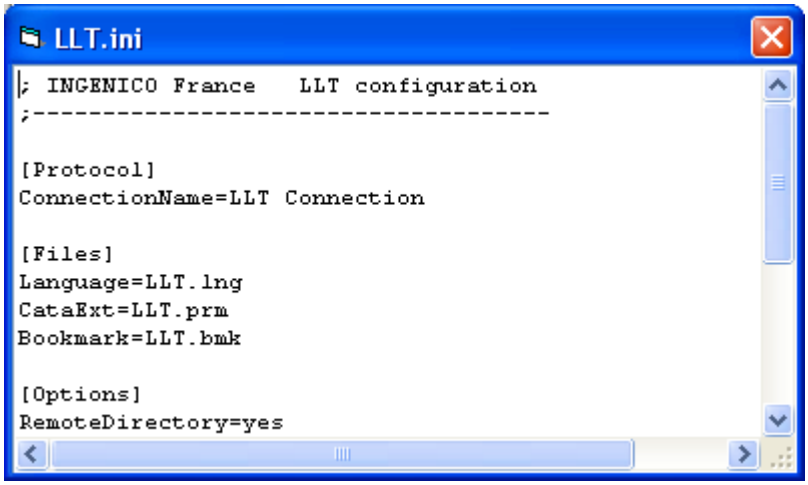
Another option 'Update_bmk' (default value: yes) can be used. The list of the favourite directories is automatically checked and updated (with disks present) when LLT is launched.

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.

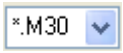
6.9.3. Direct access to a file contents

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.

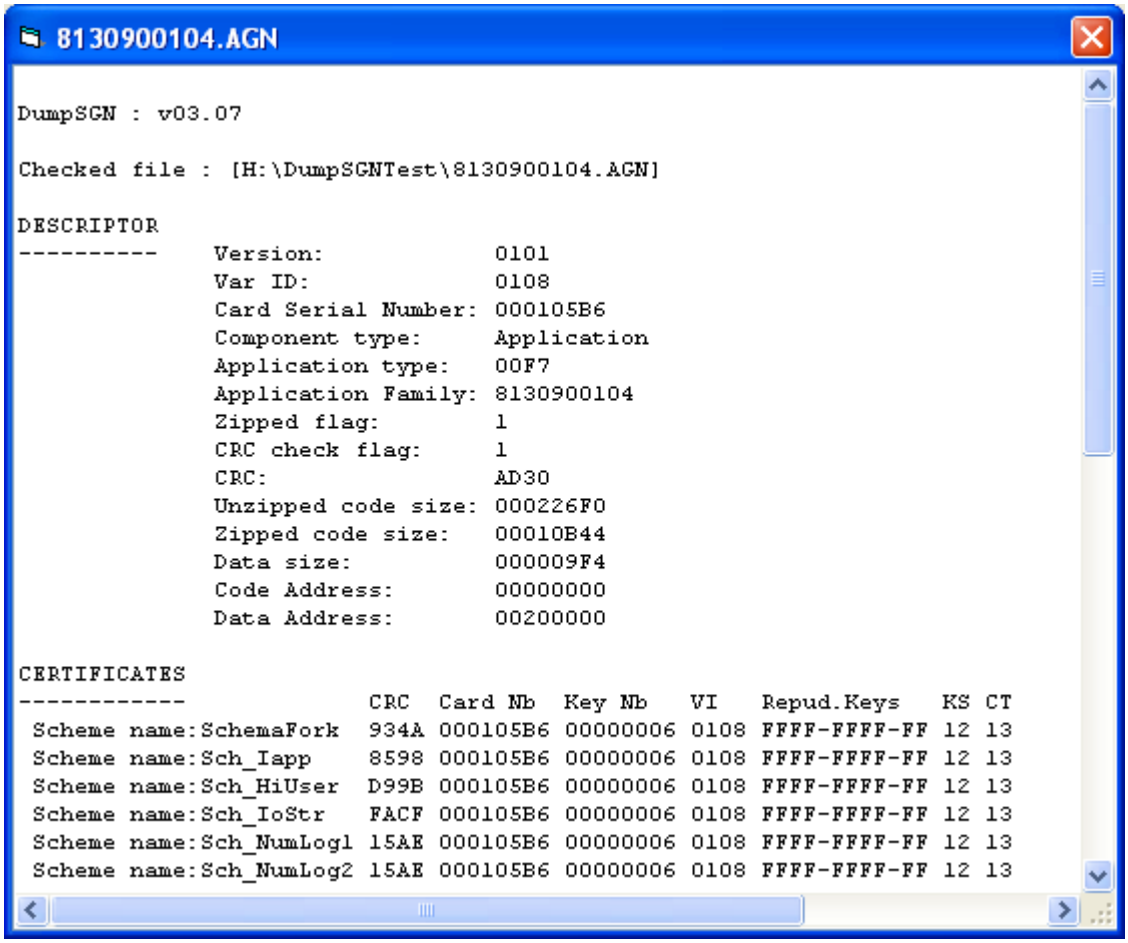


Copyright © 2012 Ingenico
All rights reserved

6.9.4. Component signature consultation

Select '*.*' in the list 

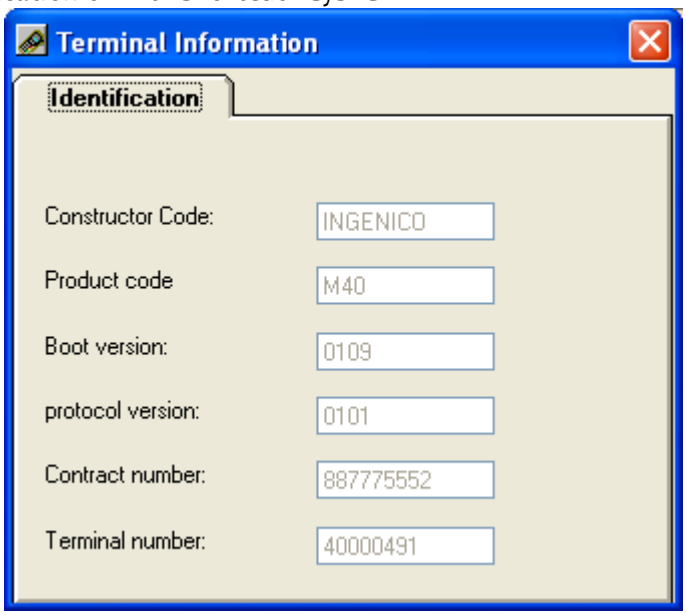
then Double click on a file with extension '.*GN' (.SGN, .AGN, .PGN, …) corresponding to a signed component to consult . The option 'Certif_SGN' in file LLT.ini must be set to on (default value: off).



Copyright © 2012 Ingenico
All rights reserved

6.9.5. Terminal identification consultation

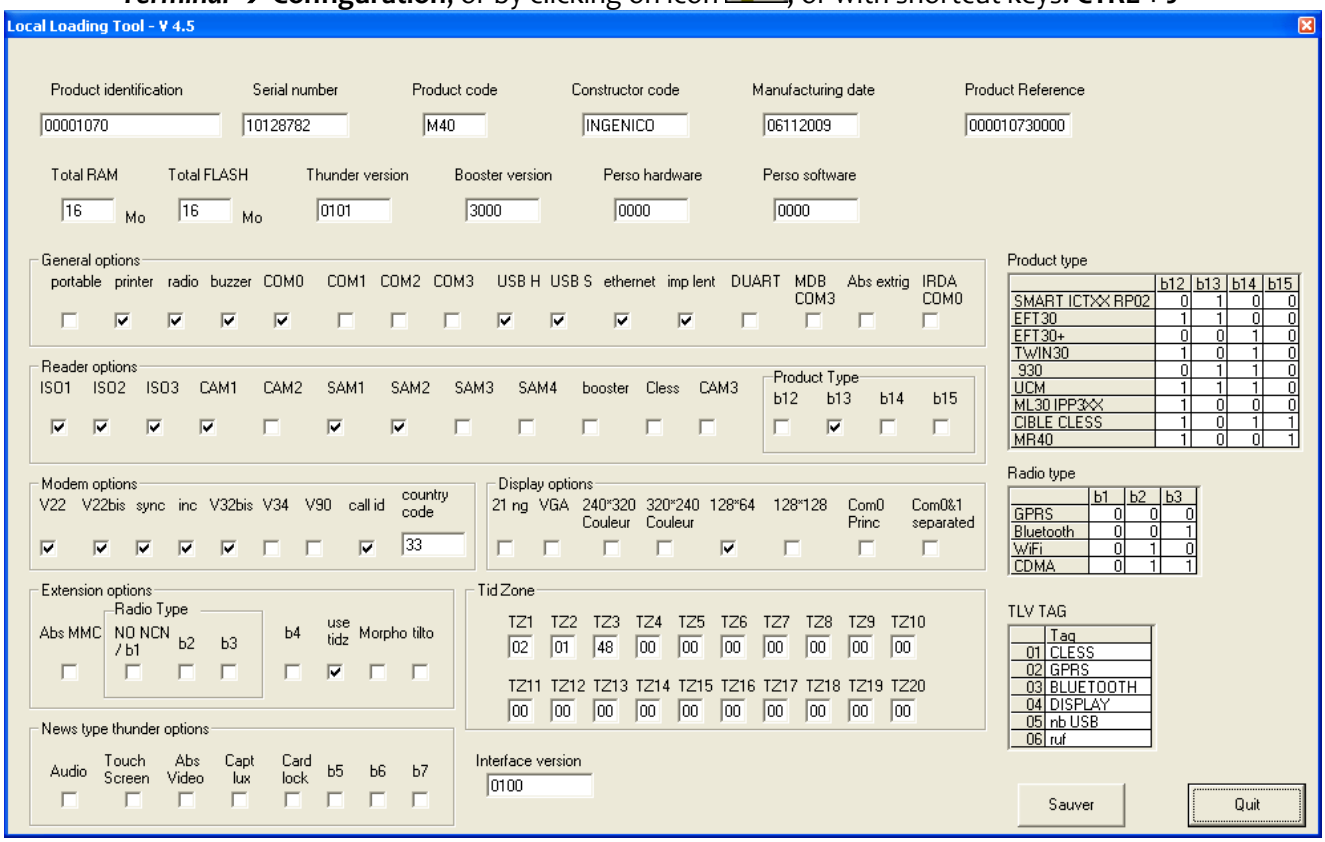
Once a connection has been established, terminal characteristics can be displayed with the menu: ***Terminal*** → ***Identification*** or with shortcut keys: **CTRL + I**.



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**



Copyright © 2012 Ingenico
All rights reserved

6.10. Catalogue file management

6.10.1. About catalogue files

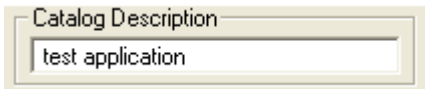
Catalogue files specify a list of files to be easily downloaded into the terminal. Their file extension is in "*.M??" form, with the two last digits which designate the product code of the target terminal.

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:

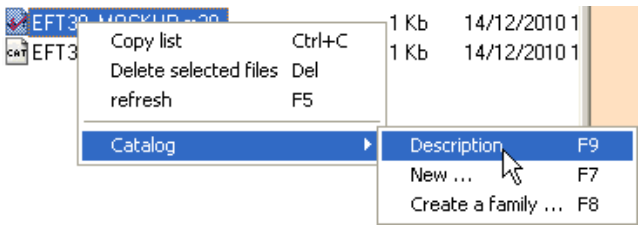
Sample	Description
C:\Dir\SAMPLE.SGN	Absolute path
SAMPLE.SGN	Relative path: same directory as the catalogue file
.\SubDir\SAMPLE.SGN	Relative path: SubDir\ is in the catalogue directory
..\SAMPLE.SGN	Relative path: parent directory from the catalogue directory
..\..\OtherDir\SAMPLE.SGN	Relative path: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

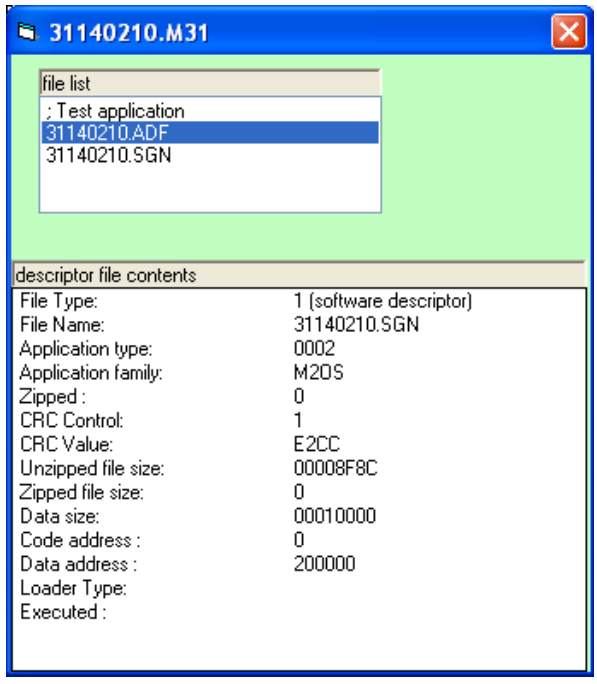
6.10.2. Consulting catalogue file

The catalogue description 

is displayed each time a catalogue file is selected.

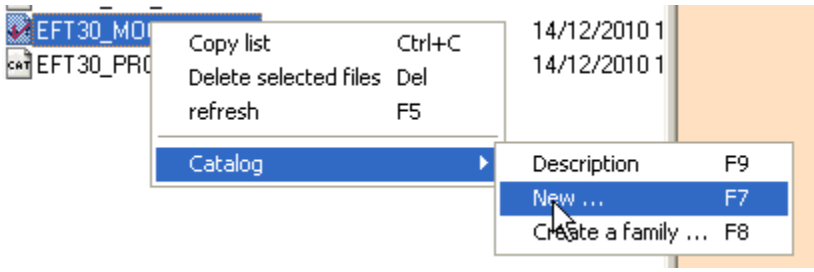


Double-click on a catalogue file, use contextual menu (with right click), or hit the **F9** key after selecting a catalogue file, allows the user to view the catalogue file contents and its associated descriptor file and the signed file (see Component signature consultation) contents by selecting it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

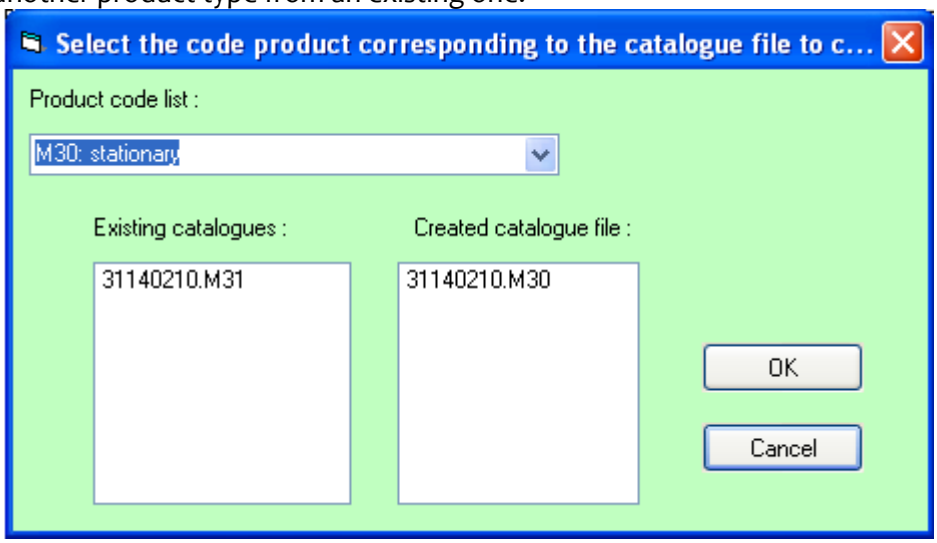


Copyright © 2012 Ingenico
All rights reserved

6.10.3. Create a new catalogue file

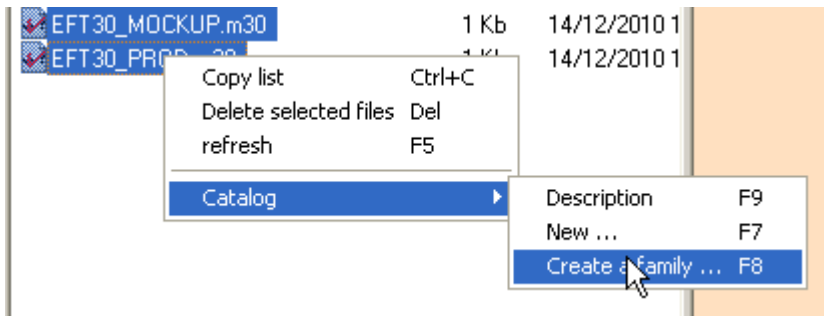


Use contextual menu (with right click) or **F7** key after selecting files. This allows the user to create catalogue files for another product type from an existing one.



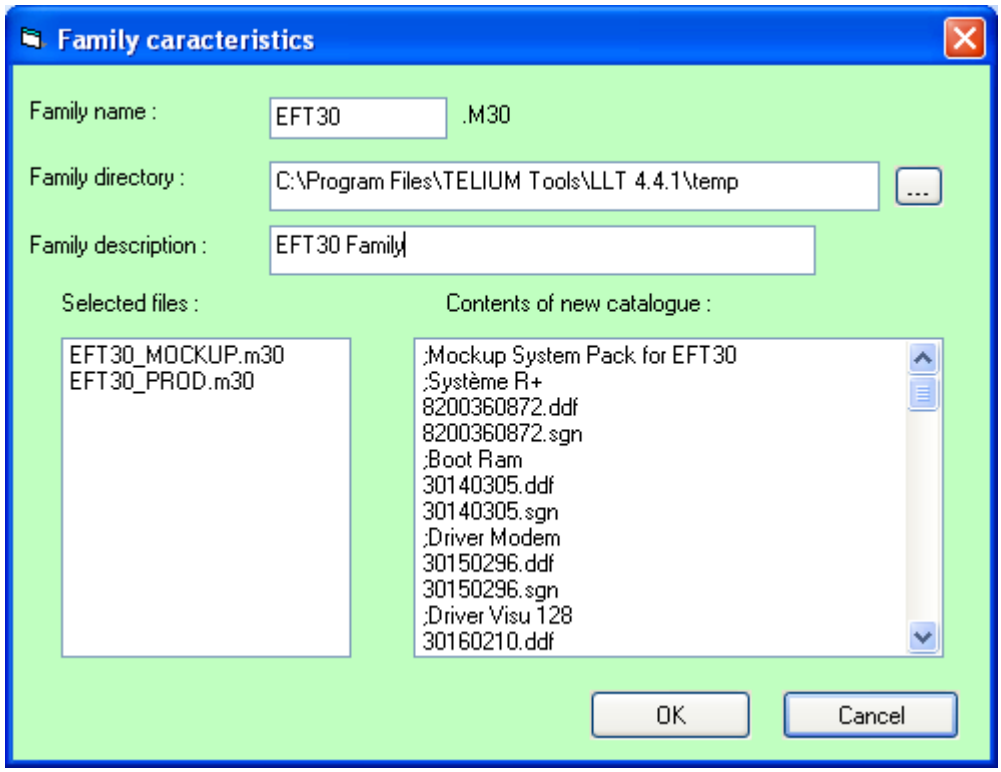
6.10.4. Create a family

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.



Copyright © 2012 Ingenico
All rights reserved

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.

Copyright © 2012 Ingenico
All rights reserved

6.11. Catalogue pack editor

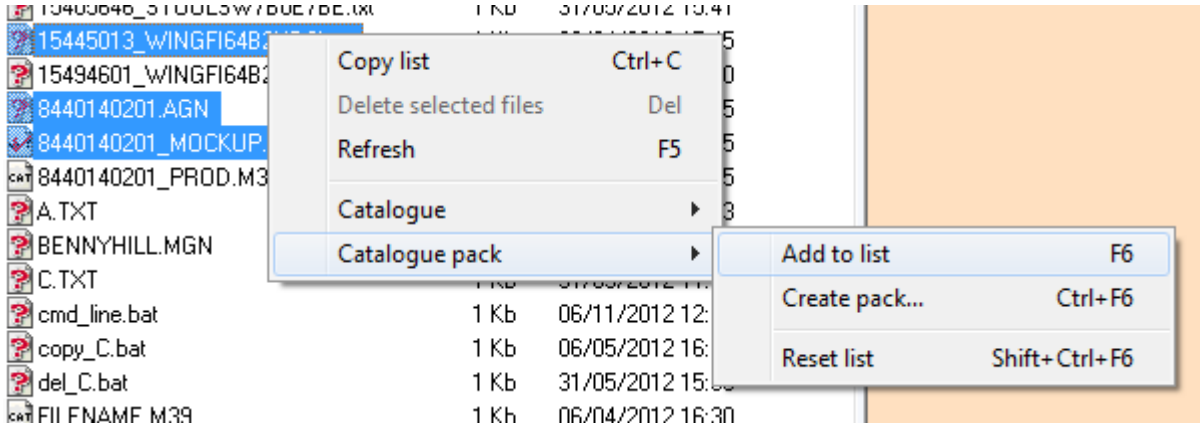
The catalogue pack is a feature which allows creating a set of files and catalogues files, grouped into a root directory.

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:



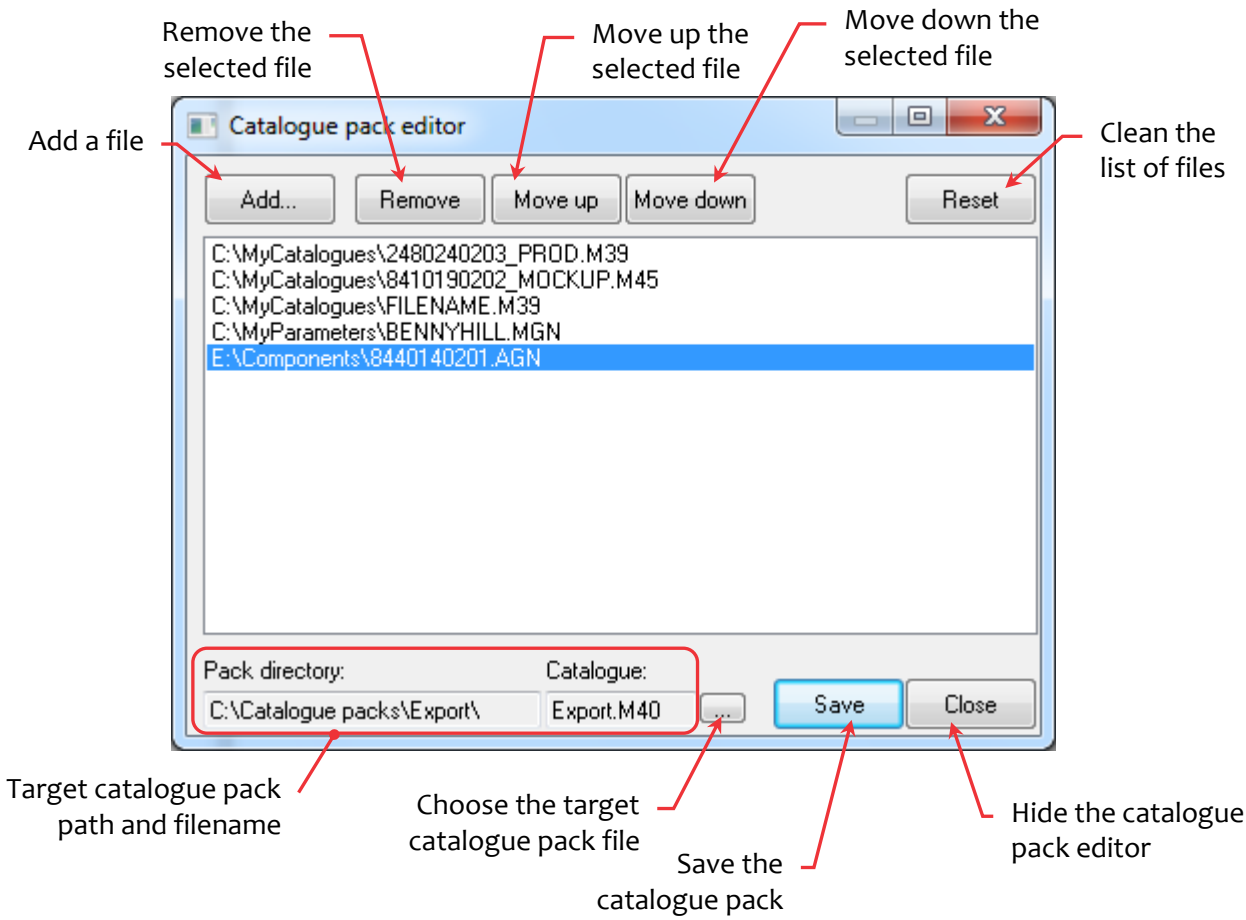
All selected files are added into the catalogue pack list.

Copyright © 2012 Ingenico
All rights reserved

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.

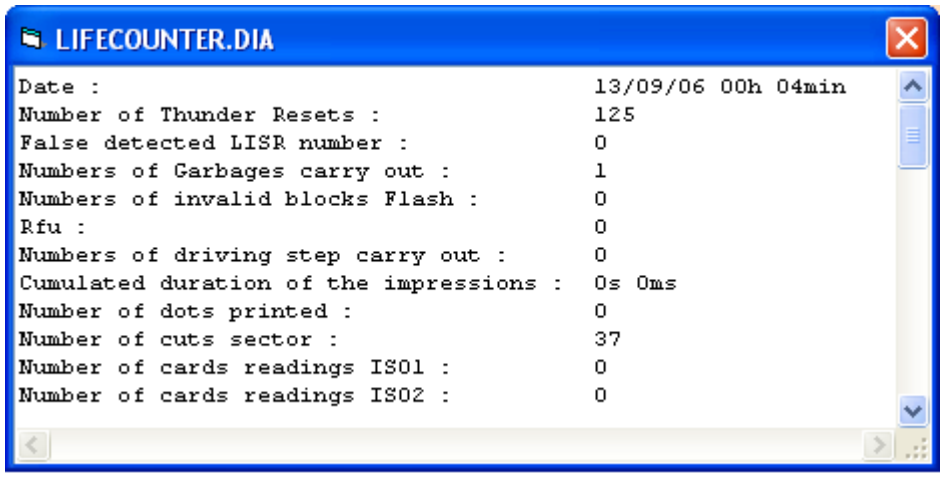
Important: If many files with the same filename are referenced in the catalogue pack list (embedded in a catalogue or directly), then files will be overwritten and the last referenced file will subsist. So, the **order of files in the catalogue pack list matters**.

Copyright © 2012 Ingenico
All rights reserved

7. Views of some files

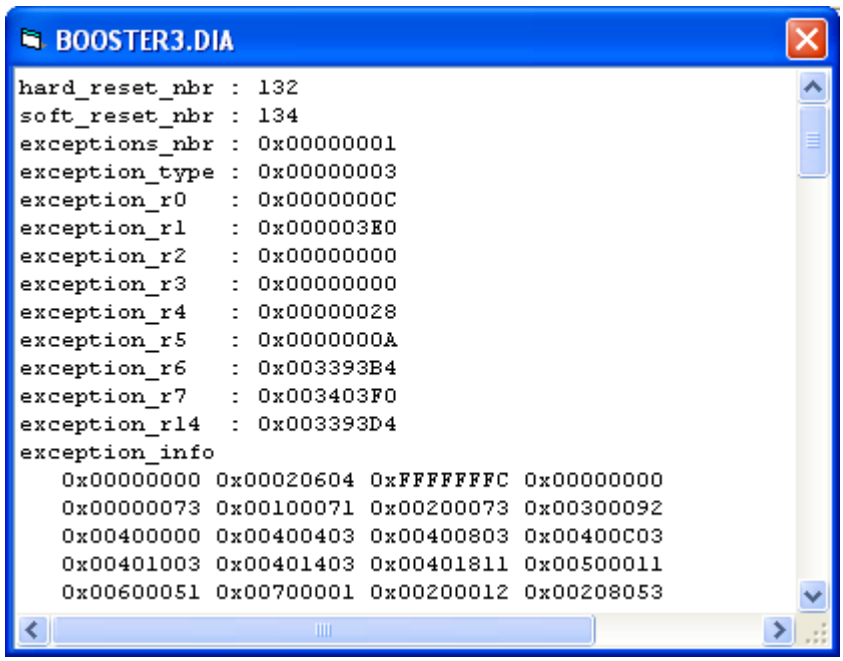
7.1. File LIFECOUNTER.DIA

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



7.2. File BOOSTER?.DIA

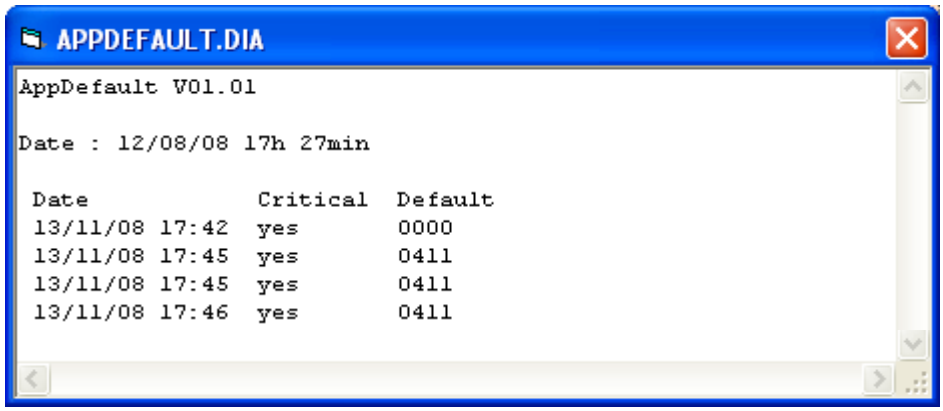
For view 'Booster?.dia' file, you must double-click on the file, and after the information of this file are displayed in a window.



Copyright © 2012 Ingenico
All rights reserved

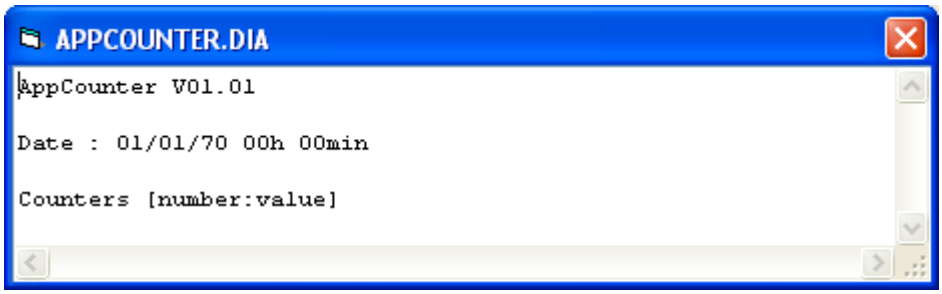
7.3. File APPDEFAULT.DIA

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



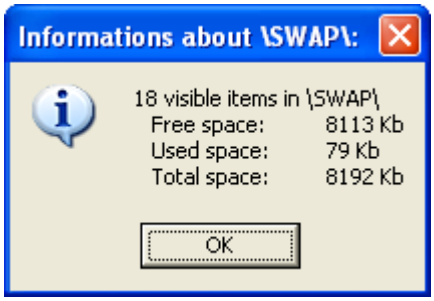
7.4. File APPCOUNTER.DIA

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.



Copyright © 2012 Ingenico
All rights reserved

8. LLT Setting

8.1. File LLT.INI

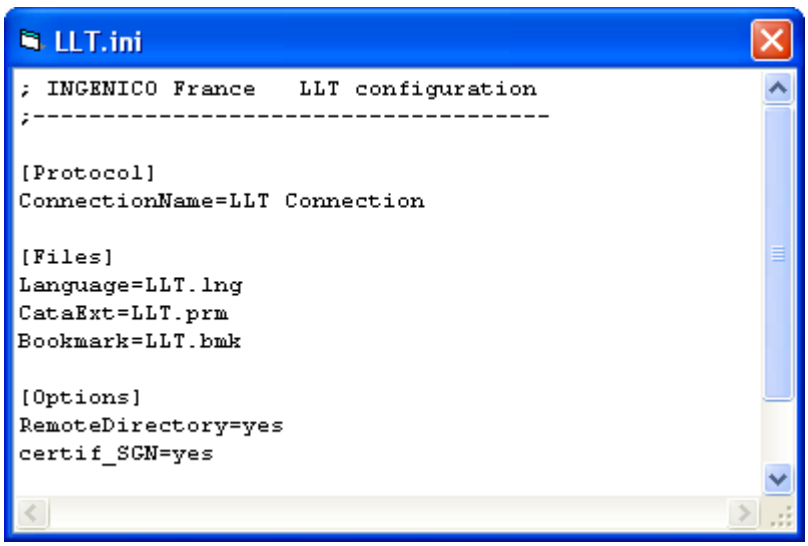
LLT configuration is given by the file "LLT.ini".

[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:



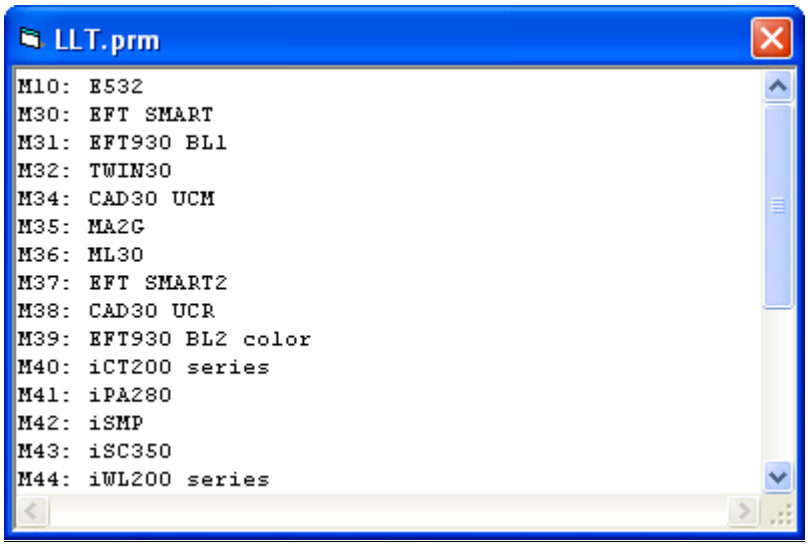
Copyright © 2012 Ingenico
All rights reserved

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:



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'.

Copyright © 2012 Ingenico
All rights reserved

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>

Copyright © 2012 Ingenico
All rights reserved

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

Copyright © 2012 Ingenico
All rights reserved

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
```

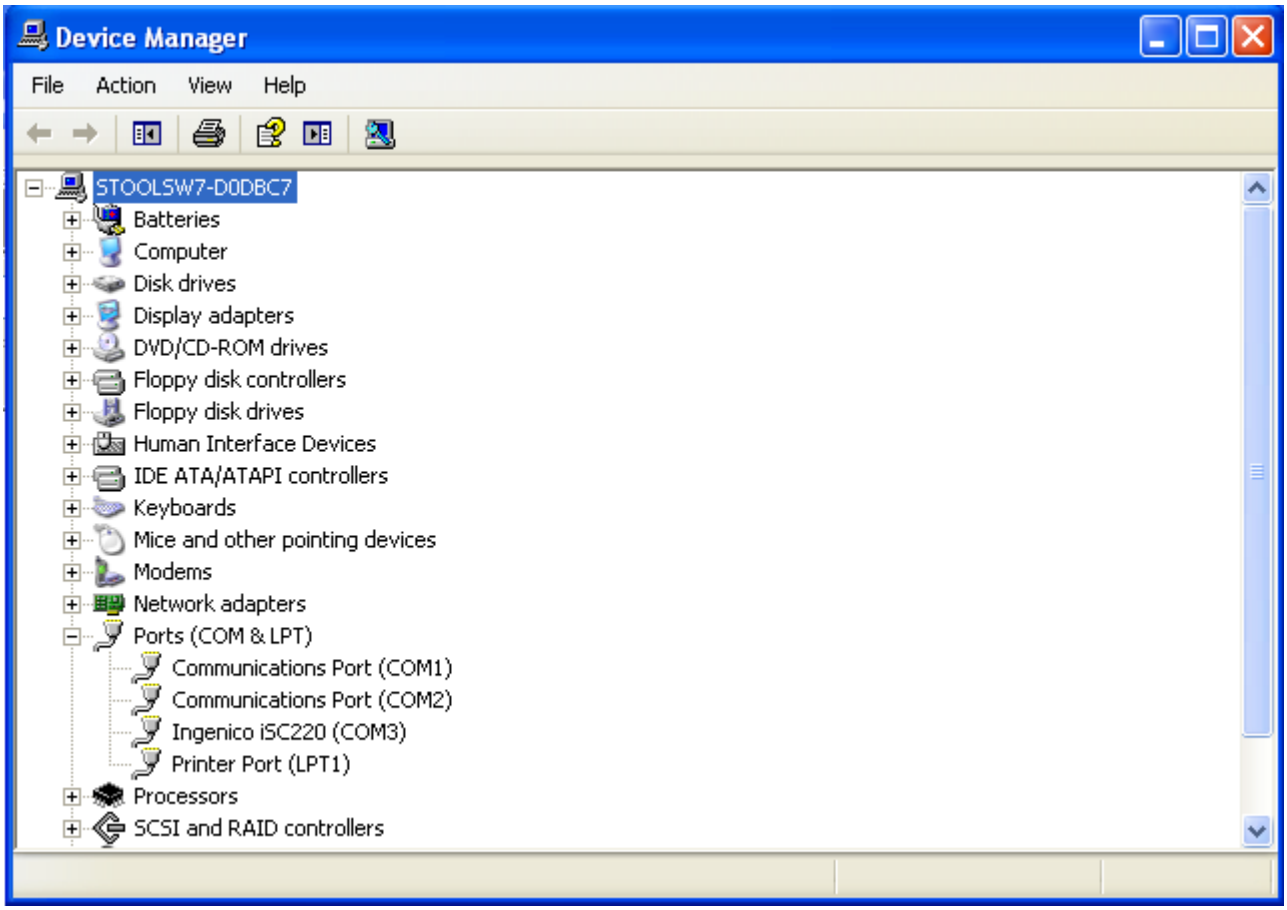
Commande file : *LoadingTest.bat*
With values:

```
@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...
```


Copyright © 2012 Ingenico
All rights reserved

8.6. Displaying the USB connection port number

Display the 'Device Manager' panel with the LLT menu: ***Connection*** → ***Device manage***r (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***.



Copyright © 2012 Ingenico
All rights reserved

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.

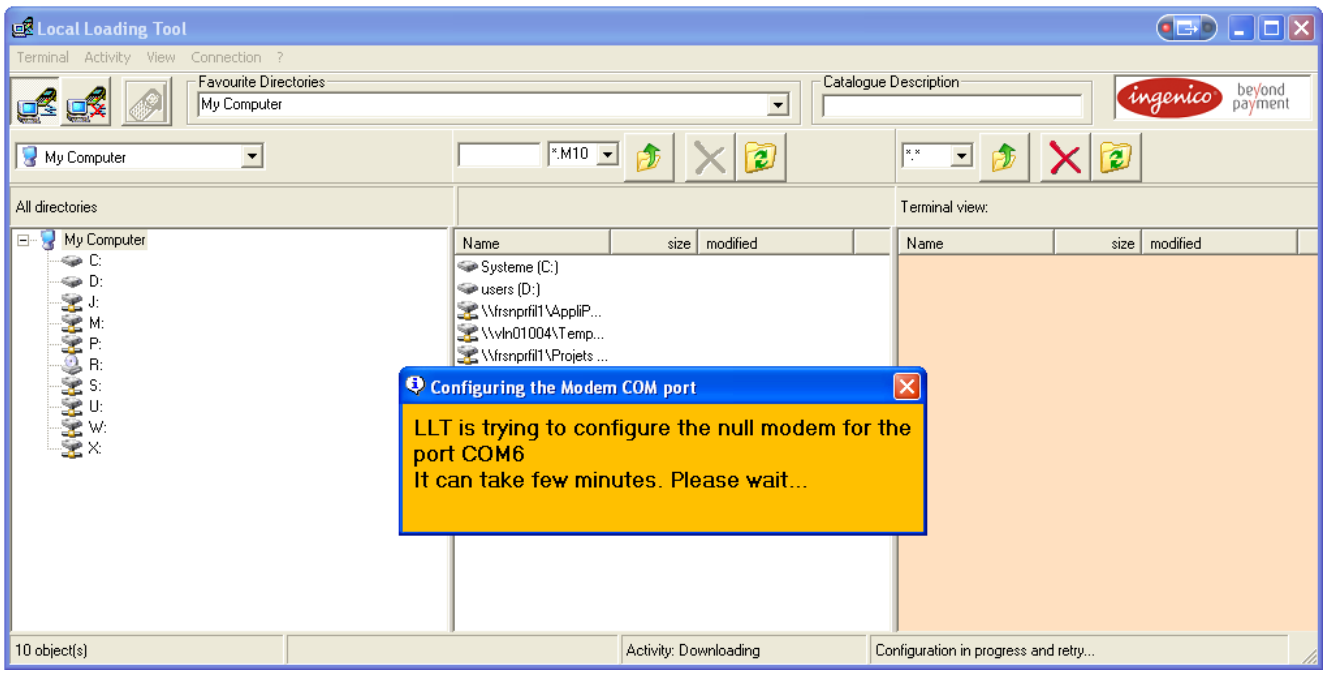
If the optional Jungo driver is also installed, and if the connected Telium terminal is compliant with, then the Jungo driver will be automatically used for this connection (instead of the Microsoft one).

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).

Copyright © 2012 Ingenico
All rights reserved

9.2.2. Connection with serial interface

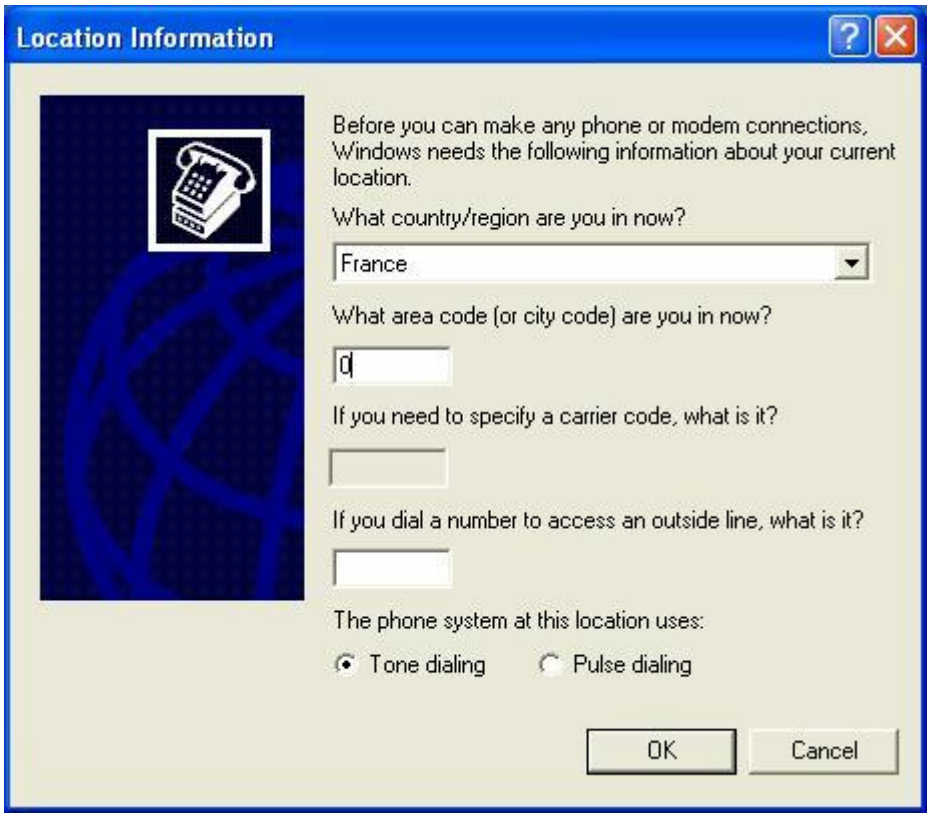
To be connected to a terminal a serial cable must be used. For that configure the PC by installing the null modem driver and determine the serial port that will be used with this connection.

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.

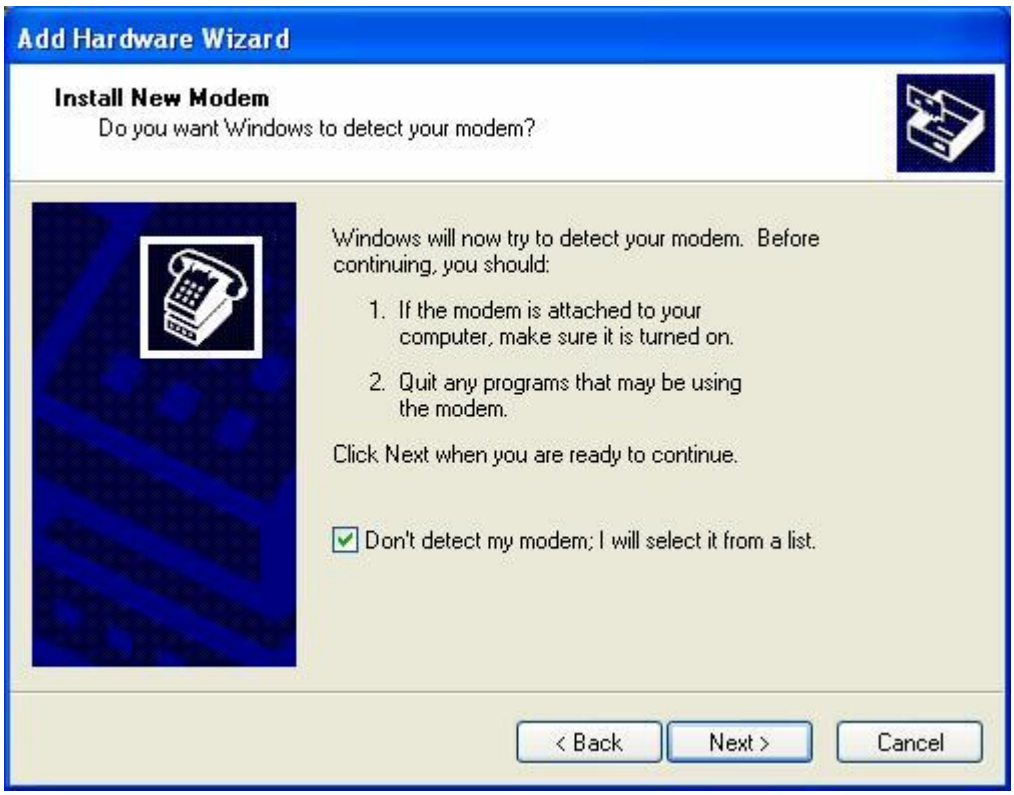
If no modem has been installed on this computer, the following screen appears:



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

Copyright © 2012 Ingenico
All rights reserved

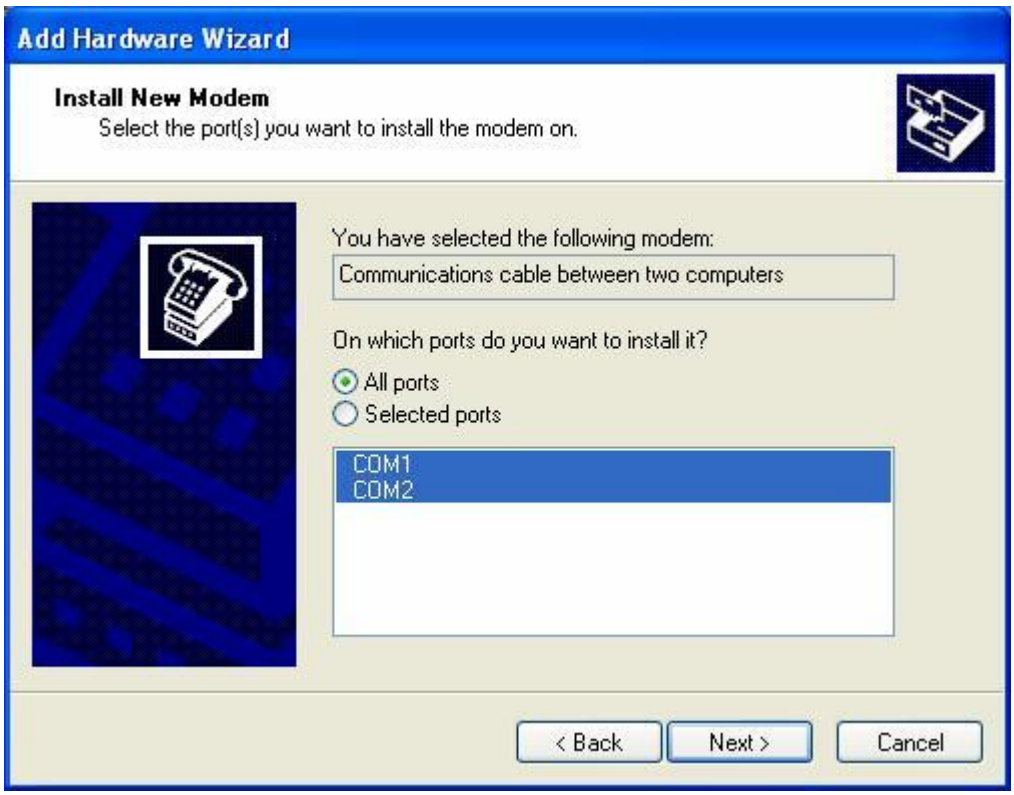
Click **"Add"** button to install the null modem driver.



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.

Copyright © 2012 Ingenico
All rights reserved

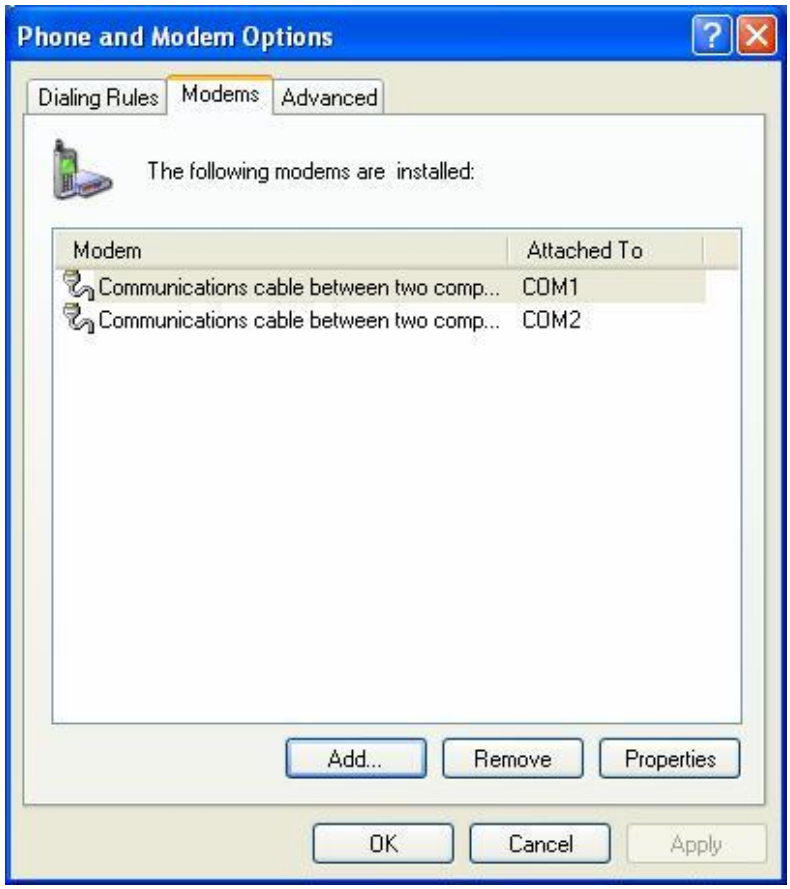
Select "**(Standards Modem Types)**" from the list "Manufacturer" and "**Communications cable between two computers**" from the list "Models".
Then click "**Next**" button to select the serial port that will be used for the connection.



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.

Copyright © 2012 Ingenico
All rights reserved

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



Click "**OK**" to validate these settings.

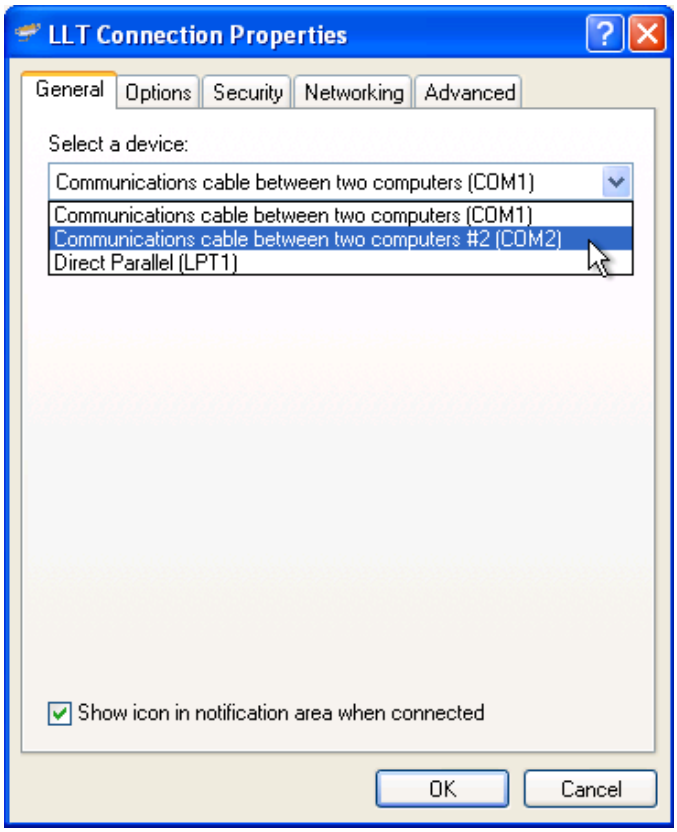
Copyright © 2012 Ingenico
All rights reserved

9.2.2.2. Use of another serial port

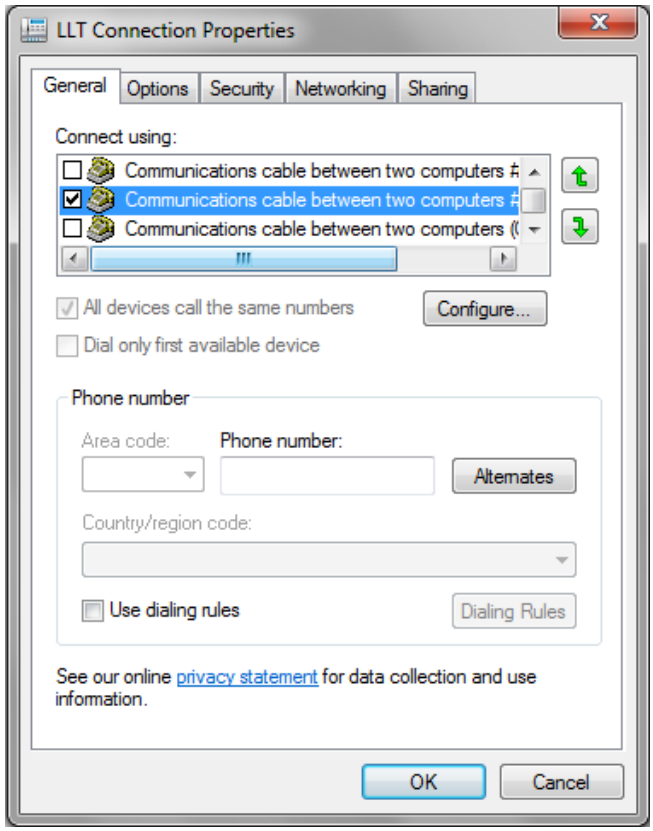
It is possible to define several serial ports in order to select later the available port (See chapter Selecting communication port). To define a new interface and a new serial port (for example using COM2), repeat the previous step described in Installing the null modem driver.

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



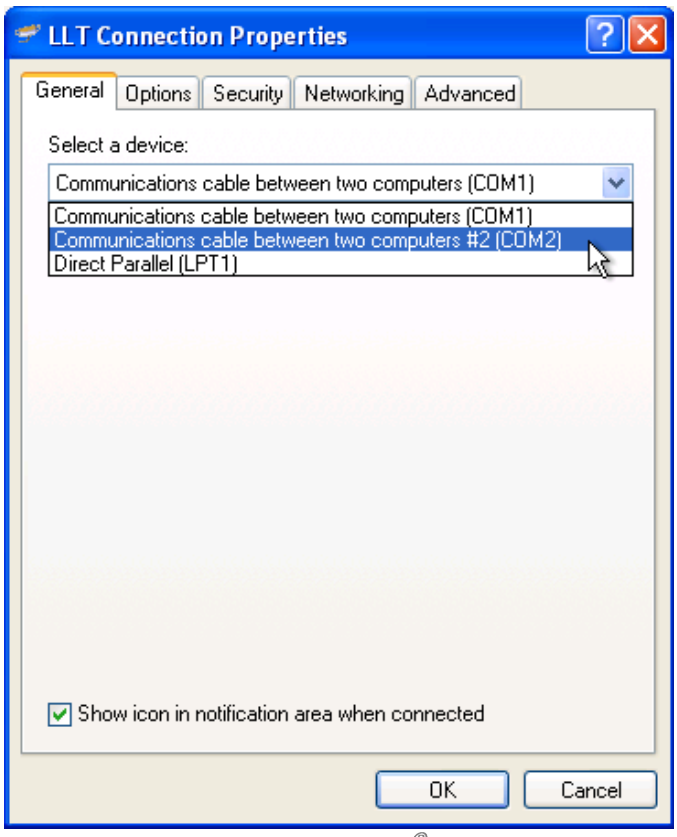
Under Windows® Vista et 7

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.

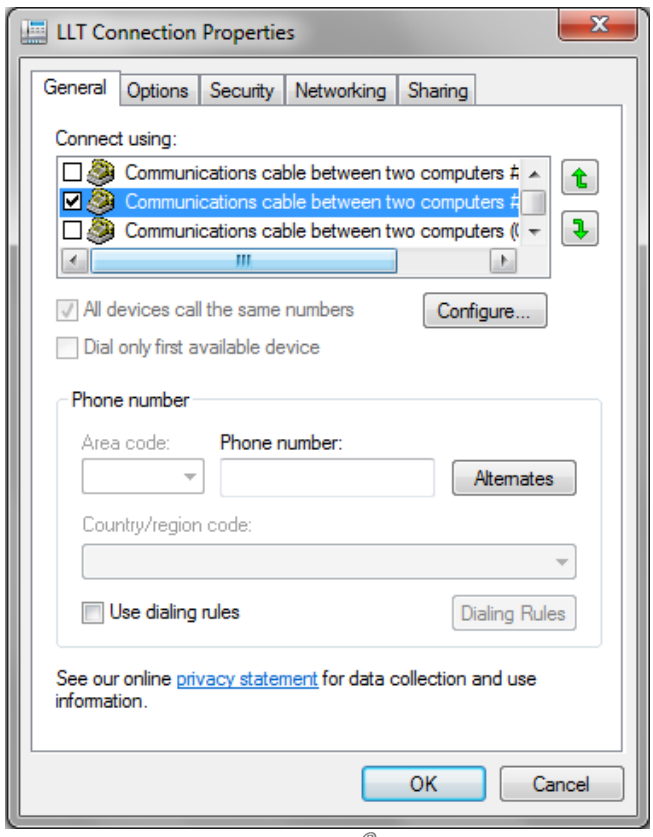
Copyright © 2012 Ingenico
All rights reserved

9.2.4. Communication port configuration

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

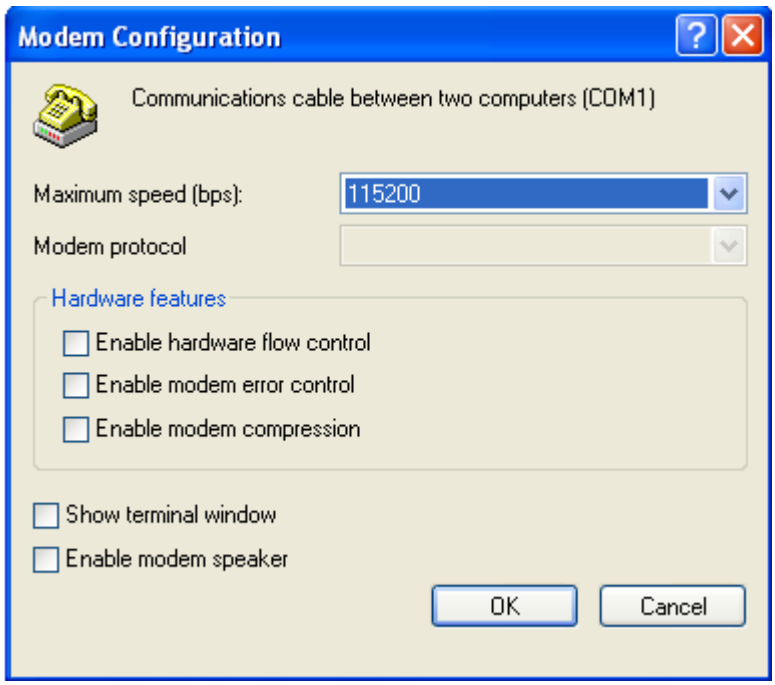


Under Windows® XP



Under Windows® Vista et 7

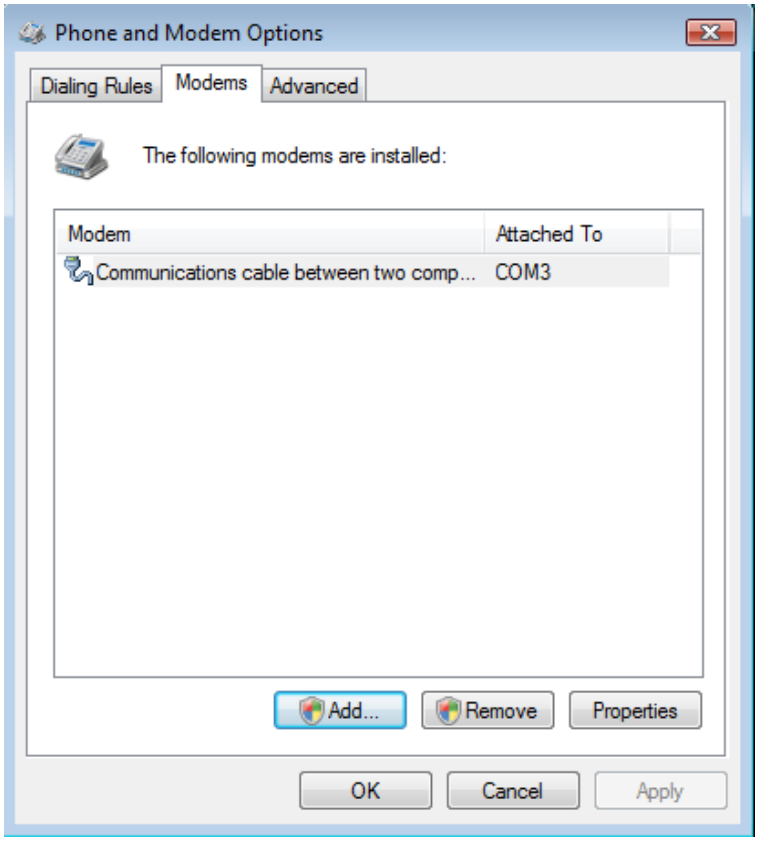
Click **"Configure…"**



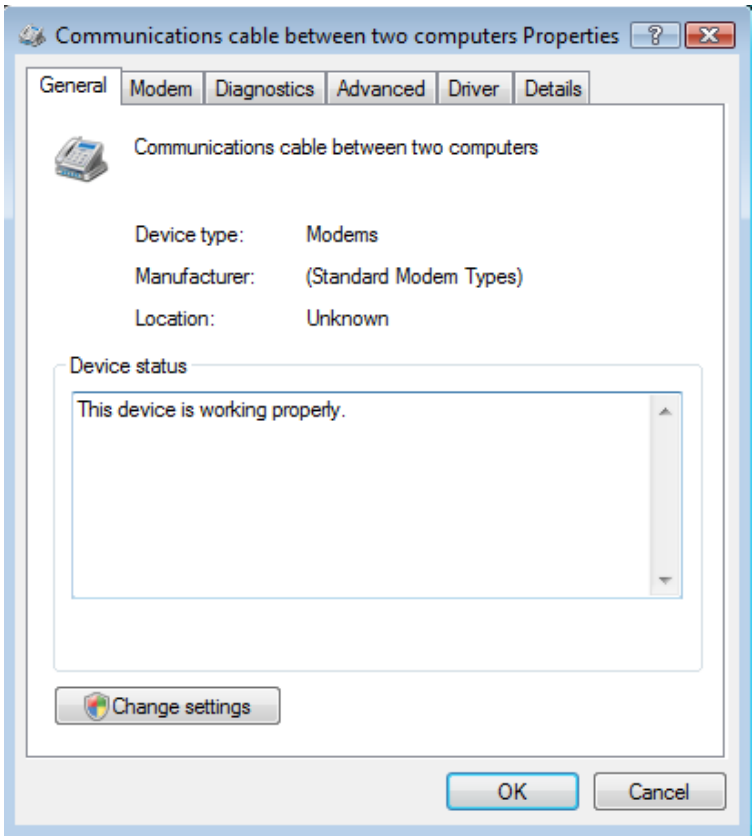
Then choose initial speed: **115200** and **disable hardware flow control**.
Click **"OK"** in the different opened windows to valid these settings.

Copyright © 2012 Ingenico
All rights reserved

Then, go to the LLT menu: '**Connection → Serial interface properties …**'

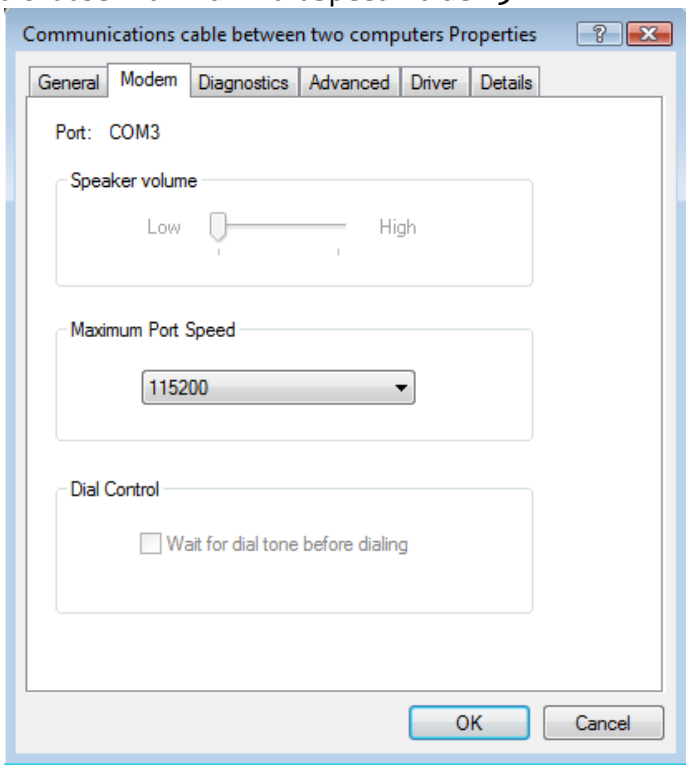


Select the port and click **"Properties".**

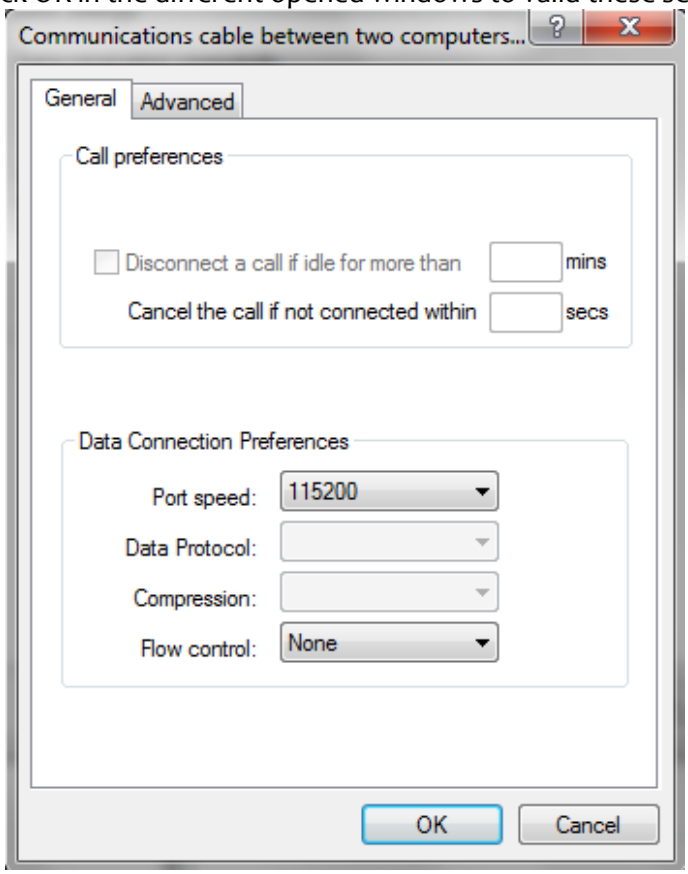


Copyright © 2012 Ingenico
All rights reserved

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.

Copyright © 2012 Ingenico
All rights reserved

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.

Copyright © 2012 Ingenico
All rights reserved

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 USB connection port number 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 Selecting communication port or see chapter Installing the null modem driver 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 Selecting communication port or Installing the null modem driver.
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.

Copyright © 2012 Ingenico
All rights reserved

10.4. Known limitations

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.

Copyright © 2012 Ingenico
All rights reserved