LLT 5

RELEASE NOTE

Security Tools team

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1 LLT 5.3.3

/ Important notice since Ingenico USB driver 3.10 /

From version 5.3.0, LLT includes the Ingenico USB driver 3.10.
This driver replaces all previous installed Ingenico USB drivers (uninstallation process is done during new driver installation).

This driver supports all Telium 1, Telium 2 and Telium Tetra terminals.

Please ensure that other installed tools are compliant with this Ingenico USB driver version.
For the following tools, make sure that the installed versions are greater or equal to:

IngeDev	8.8
IngeWeb	0.10
LLT	5.3
QAtcherV3	2.1
Sign/Kit	3.8

1_1 What is new?

/ Fixes and improvements

Subject	Description
Backspace key	Avoid browsing the parent directory (assigned to the “backspace” key) while editing filter or path bar
Target file for command-line	Remove the unwanted file-existence check in command-line mode for the “target” file
File modifications monitor	Fixed the unexpected duplicate of the same directory, that occurred during robustness tests of the auto-refresh feature
Tetra commands report	Improve the relevance of error messages, in conjunction with an improvement since SDK 11.14.0
Force uppercase for command-line	Enable by default the Force uppercase option for the command-line mode, and allow setting this option

1_2 Known limitations

LLT 5.3 is supporting the following operating system versions:

	32 bits	64 bits
Windows XP	✅	
Windows Vista	✅	✅
Windows Seven	✅	✅
Windows 8	✅	✅
Windows 8.1	✅	✅
Windows 10	✅	✅
Ubuntu 16		✅
Mac OS X		✅

LLT shall run with other operating system versions not listed in the above table, however no support will be provided for them.

With the present version, only one terminal connection is possible at one time per LLT instance.

The following features are not yet available:

- Editing feature: the file viewer allows the reading of local files only. The null characters are represented by a dot (“.”)
- Viewing the descriptor of some signed components
- Editing the catalogue files: please use an external text editor

LLT 5.x doesn’t support any more terminals plugged through RS232 port (serial link).
In this case, please use the LLT 4.5.4.1 (or an earlier version).

1_3 Known issues

Issue description	Workaround
Unable to connect the Telium Tetra terminal, if the USB cable is plugged after the terminal starting (with LLTCLIENT terminal application < v.1.3.2)	Plug the USB cable, then restart the terminal and launch the LLT Client application (keep on pressing the dot key until a folder icon appears on the screen)
Deleting multiple files doesn’t take into account the whole selection	Select the non-deleted files and repeat the action
Stressing the LLT commands on the terminal can cause unexpected LLT reaction	It is advised to wait for the current command to be completed (when browsing during a file transfer for example), and wait at least 10 seconds after reconnecting the terminal

2_LLT 5.3.2

/ Fixes

Subject	Description
Mac OS launcher	Fix the missing Java Runtime error occurring at LLT start-up for Mac operating systems
Installation clean-up	Remove all obsolete “jLLT” files in the LLT installation directory, since the executable and log files are named “LLT”

/ New features and improvements

Subject	Description
Browse the parent directory	Add a button that allows browsing the parent directory, and bind this feature with the “Backspace” shortcut key
Refresh with F5 key	Pressing the F5 key refreshes the current directory
Automatic filter	No more filter the inner files of catalogues
Plugged terminals icons	Now the next available action is only displayed when the mouse is over a plugged terminal
Selected directory in browsers	Always show the browser selection, even if it has not the focus
Modifications monitor optimizations	Improve performances and stability of the files modifications monitor; also avoid the browser revealing each modification
Add / consult favorites paths	Inverse the mouse button behavior that adds, or only shows, the favorites path list
Unavailable terminal state	Add a new icon dedicated for the unavailable terminal state

3_LLT 5.3.0

/ Fixes

Subject	Description
ESSP parsing	Fix the ESSP parsing (P3T packages), when format version is more than 01.02
Automatic destination	Add an exception for destination of “EXTPRN.CFG” files (correct destination is /SWAP/)

/ New features and improvements

Subject	Description
Support Ubuntu and Mac OS X	LLT can run on Ubuntu and Mac operating systems
Ingenico USB driver 3.10	LLT embeds “Ingenico USB driver 3.10” (WHQL certified)
Communication speed-up	Use a new version of the communication layer (ComLayer) and extend the communication buffers size
Sources project update	Migration to Eclipse RCP 4.6.2
Deprecated descriptor fields	Hide some deprecated fields in descriptor of Tetra components: data size, code and data address
New “clean” API for IngeDev	Add the “clean” API to the IngeDev plugin
User guide	Update the User guide with new feature and command-line enhancements

4_LLT 5.2.6

/ Fixes

Subject	Description
Operation forbidden errors	Fix the “Operation forbidden…” errors that often occurred when a data transfer is in progress
Refresh catalogue content	Fix the catalogue content refreshing when it is modified outside LLT
FTP connection problem	On Telium 1 and 2, fix the FTP issue when re-connecting a previously connected terminal. The missing “/SWAP/” doesn’t appear anymore.
Uninstall command	Now, in the command-line and IngeDev plugin modes, the “delete” method applied to package uninstall it correctly
Terminal naming	Rename “iCMP Nexgen” into “Link2xxx”
Life-counters parsing	Fix the NumberFormatException that occurred when parsing the “LIFECOUNTER.DIA” file, for Telium 1 and Telium 2
Mandatory plugged terminal	Remove the mandatory having a plugged terminal for offline action in command-line mode

/ New features and improvements

Subject	Description
Ingenico USB driver 3.00	LLT embeds “Ingenico USB driver 3.00” (beta version)

Clean the terminal	Add a new command in UI toolbar and in command-line, that cleaning all erasable content of the terminal
Check catalogs to download	The catalogue extension is now verified and must match the terminal's product code
Terminal identification	Add the new product codes definitions for Move RTC
Communication speed-up	Use a new version of the communication layer (ComLayer) and extend the communication buffers size
Readable and writable files	Take into account of the readable and writable flags and adapt allowed actions on files
New Tetra Life-counters	Add new Life-counters definitions for Tetra terminals
Outside files refresh	Monitor file changes outside of LLT, and update the file-browser in consequence
Files deletion	Consider that deleting more than 10 files can be shortened into a single notification (in status bar and actions history list), in order to avoid wasting a long time
Terminals enumeration	Use the version 1.1.1 of the terminal enumerator library, and fix the self-extracting of the DLL file
Result file	For the command-line mode, generate a file with an error code, if any
Parsed content extraction	Allow export of parsed content through the command-line mode, with the "parse" action

5_LLT 5.2.5

/ Fixes and improvements

Subject	Description
Using of the same COM port	Completely clear the terminal information when it is unplugged or rebooted, in order to avoid mistakes and connection failure on the next connection.
Uninstall packages	Allow selection (invert the selection) of all un-installable packages in one-click, in the Installed package view
Signature usages	Recognize the MOCKUP_WEB_PLATFORM signature usage for the Telium Tetra certificates analyzer
Log terminal information	When a terminal just connected, then add its information in Actions history

6_LLT 5.2.4

/ Fixes

Subject	Description
Packages extension in uppercase	In Tetra, force the extension for packages files (ignore uppercase transformation for the other files). This feature is activated by default and can be disabled through the toolbar
Terminal model query	Fix the error that occurred when querying the Terminal Model on an old Tetra terminal
Device command-line parameter	The optional parameter “device” was mandatory for “Islero Serial” and “Terminal Model” properties
Script execution exit	Avoid exiting the entire script execution
Unavailable terminal date	Handle old LLT CLIENT versions (application in the terminal) which didn’t yet support the terminal date
Terminal disconnection error	Fix the exception that occurred when the terminal is already unavailable during its disconnection
Null selection error	Handle the case of an empty selection when the user click on the file-browser while the files are not yet displayed
Zipped legacy components	Fix the file error that occurred when opening a signed component with zipped content
Code Address formatting	Fix the FormatFlagsConversionMismatchException that concerns some particular values for “Code Address” property

Schemes parsing error	Fix the BufferUnderflowException that occurred with some schemes
APID property	Fix the presentation of APID values, in certificates

/ Improvements

Subject	Description
Tetra and Telium 1 & Telium 2 descriptors viewer	Display more details about Tetra packages and legacy signed components: • Tetra schemes information • Telium 1 signed components • ESSP information • Certificates information
Optimize the filter	Speed-up and trigger the search after a delay for file-search, filter the list of installed components and packages, filter properties in descriptor viewer…
`ignore errors` option in command-line	Add new commands: `enable` and `disable` and the option: `ignore errors`
Update terminals definition	Add new 9 PIDs and 5 product codes
Improve errors display in properties viewers	If the first value of the properties list is an error, then emphasize its message
Direct analysis of Tetra components	Allow reading the Tetra components information outside a package (`*.T3?`, `*.S3?` and `*.S3S.mockup` files)
Telium 2 components icon	Use a dedicated icon for Telium 2 signed components

7_LLT 5.2.2

/ Fixes and improvements

Subject	Description
IP stack conflict	Fix the IP stack conflict when the LLT is used through the IngeDev plugin
Enrich the Terminal observatory	Enhance the Terminal observatory for Telium 1 & 2 and Telium Tetra: handle multiple data sources and add various data representations
Auto-close tabs	When a terminal is unplugged its related tabs are automatically closed
Islero serial number	New API allowing retrieving the Islero serial number

8_LLT 5.2.1

/ Fixes

Subject	Description
Missing error reporting	Fix the error reporting for folder creation, rename, delete and drag'n'drop operations
Browsing a folder named like a catalogue	A folder named like a catalogue causes the browsing malfunction
Handle error during Legacy transfers	Improve the error handling during transfer on Legacy, for example when a file to download is bigger than the available space

/ Improvements

Subject	Description
Debug logs for command-line	Display logs in DEBUG level only when the verbose option is enabled
Transfer progression	Adjust the refresh-rate of the transfer progress-bar depending on the file size
Terminal observatory	Use the new properties viewer for all Terminal observatories
Memory status	Add the memory status for Tetra terminals
Suspend keep-alive while transfer	Add suspend and resume automatic keep-alive for file transfers
Automatic destination exceptions	Add some exceptions for the automatic destination, in order to target the HOST directory instead of SWAP
Increase download frames size	Tune the frame size for files transfer in order to optimize the file downloading
Telium range check	Take into account of the destination when downloading a file: check the consistency only when the destination is "SWAP" or "package"
File selection	Allow the file's deselection when the user clicks on an empty area of the details panel. Fix the availability of commands depending on the current selection
Drag'n'drop for directories	Allow to move or copy (by holding-down the Ctrl key) a directory and its content, by a drag'n'drop operation (for the local-browser)
Icons update	Enforce the contrast of transfer icons
Terminal name	Keep Terminal model name after connection

/ New features

Subject	Description
Direct reading of terminal files	Allow reading files directly from the terminal without copying it
Analyse the package information	Analyse the information of Telium Tetra Packages, in order to see their descriptor data and their inner files (supported package files are P3T, P3O, P3A, P3L, P3P, P3K, P3S, P3D)
Analyse the signed components	Analyse the legacy signed components (with extension AGN, PGN, DGN, LGN, KGN, MGN)
Analyse the terminal life-counters	Analyse the LIFECOUNTER.DIA diagnostic file for all terminal ranges
Analyse the descriptor files	Analyse the legacy Descriptor files (with extension ADF, DDF, LDF and PDF)

9_LLT 5.2.0

/ Fixes and improvements

Subject	Description
Sources project update	Migration to Eclipse RCP 4.5 and Java 8. The compilation is now performed by Maven.
Display of errors	Fix the error report that were not displayed after a first terminal disconnection (for Legacy terminals)
Connection of T1 and T2 terminals	Fix the connection problem with Telium 1 and Telium 2 terminals, that occurred after an error
Installed components list	Display “not applicable” values in installed Legacy components list

10_LLT 5.1.4

/ Fixes and improvements

Subject	Description
Missing file in catalogues	Raise an error when a referenced file is missing when downloading a catalogue file; the download isn’t performed
Negative time error	Handle the upload of terminal files that don’t provide their modified date
Error after downloading with IngeDev	Fix the NullPointerException occurred after downloading a Telium 2 component with IngeDev

Automatic filter disturbances	Fix the trouble on the terminal-browser filter, when the automatic filter is enabled
Error in Installed components list	Handle the non-conventional naming for Legacy components
Uninstall mandatory packages	Prevent mandatory packages to be uninstalled (for Telium Tetra)
Icon sharpness	Fix the sharpness of the LLT icon used during the execution

11_LLT 5.1.3

/ Fixes

Subject	Description
Installation of legacy components	Fix the installation of downloaded Telium 1 or Telium 2 components (e.g. the Manager)
Unable to connect legacy terminals	Fix the connection trouble with Telium 1 and Telium 2 terminals (e.g. iWL280, iPP350, iCMP…)
Download prematurely considered as finished	Fix the download trouble, when a transfer is prematurely considered as finished. This is related to the download of catalogues, when using the command-line or the plugin API
Infinite loop when trying to connect	Fix the infinite loop when attempt to connect to a non-ready terminal, using the command-line or the plugin API
Components validation is not reported	Now validation of downloaded packages and activity errors are reported when disconnection is initiated by command-line or the plugin API
Switching the terminal activity may cause dysfunction	Fix the activity change unexpected behaviours, when the root is the current directory (for Legacy terminals)
Pending transfer tasks are not processed	Fix the bug that stops processing pending transfer tasks after an error occurred
Disconnection timeout is too short	Remove the disconnection timeout and display a dialog-box to force the disconnection

/ New features and improvements

Subject	Description

Automatic download destination	Automatically determine the suitable download destination, depending on the extension of the file to be downloaded:
	• Telium 1 and Telium 2:
	  ○ Signed and descriptor files, default for catalogue ➔ /SWAP/
	  ○ Others ➔ /HOST/
	• Telium Tetra:
	  ○ Packages files, default for catalogue ➔ /package/
	  ○ Others ➔ /import/
	This option is enabled by default. Any change will remain at the next LLT start-up

Automatically filter the catalogues	Automatically filter the catalogues depending on the connected terminal (product code). This option is disabled by default. Any change will remain at the next LLT start-up
Add the property query command	Add the ability to query the terminal properties through the plugin API and the command-line
Add the activity switch command	Add the ability to change the terminal activity through the plugin API and the command-line (for legacy terminals)
Add the terminals listing command	Add the ability to view the plugged terminals details through the command-line
Improve favorite paths	Add a favorite path through a contextual menu when clicking on a file or directly on the star icon. A right click on the star icon just opens the favorites panel, without adding the current path
Help	Display the integrated help contents via a menu
LLT version	Show the LLT version via a menu
Expected file check when downloading	When downloading files to the terminal, LLT verifies these files are suitable for the connected terminal
New branding	Modify the splash-screen and the software icon according to the new Ingenico Group branding. Also standardize the wording of “Ingenico Group”
New terminals definition	Add the terminal identifiers (PID) for missing Telium 1, Telium 2 and Tetra terminals
Notify terminal changes	Through the plugin API, user is notified of each terminal changes
Package types review	Update the package-types definition in the “Installed components list”
Java check	Remove the java presence check during LLT installation. This check is obsolete since the appropriate JRE is bundled into the setup
Jungo v2.80	Update Jungo to version 2.80

12_LLT 5.1.2

/ Fixes and improvements

Subject	Description
No-refresh after a download	Fix the refresh bug when a download is completed
Transfers not processed	For Telium 1 and Telium 2: continue the processing of the transfer tasks list even if a FTP error occurs
Downloaded filename limit	For Telium 1 and Telium 2, inform the user that files with name containing more than 15 characters cannot be downloaded
Force uppercase option	Enable by default the “Force the uppercase for downloaded files” option only for Telium 1 and Telium 2

13_LLT 5.1.1

/ Fixes and improvements

Subject	Description
Download performance issue	Improve the download speed of files (especially small files, more than 2 times faster)
Bug when uploading files by drag and drop	Fix the error that occurred when uploading a file from the terminal by drag and drop
Multiple Java versions bug	Embed the right Java version to use into the installation

14_LLT 5.1.0

/ New features

Subject	Description
Telium 1 and Telium 2 terminals support	Support the Telium 1 and Telium 2 terminals (only if they are compatible with the Ingenico USB Jungo driver)
Drag and drop for files transfers	Add the ability to download or upload a file with a drag and drop
Favorite paths	Allow to save the favorite paths for browsers
Force the uppercase filenames	Add an option to force the renaming of downloaded file in uppercase (in order to be compliant with the Telium 1 and Telium 2 file-system)
Destination in catalogue file	Allow to change the target directory for downloads in the catalogue files

/ Fixes and improvements

Subject	Description
Deleting imported files	Allow to delete files in the “/export/” directory (downloaded files into “/import/”)
Error balloon	Improve the status-bar report when an error occurs
Single connection	Allow only one connection at a time
Optional Jungo installation	Current Ingenico USB Jungo driver installed version is taken into account at LLT installation. The user is invited to choose to install it or not

15_LLT 5.0.7

/ Improvements

Subject	Description
New terminals support	Any new plugged terminal is recognize by LLT as part of the Telium Tetra range (qualified terminals: Desk5000 and Desk3xxx, Lane5000, Move5000 and Move3xxx)
Display folders and containers on the top	In the file-browsers, folders and containers-files are displayed on the top of the details list

/ Fixes

Subject	Description
Wrong terminal range identification	Fix the identification error when plugging a terminal
The terminal doesn’t appear or appears as Disconnected	In the Plugged terminals panel, the terminal disappeared from the list after reboots, or appeared Disconnected
LLT startup could take a while	Speed-up the folders listing on LLT starting (when the last opened folder is recalled)
Improve LLT disconnection	When a “Communication error” occurs, the LLT did not properly disconnect. Terminal connection at reboot is improved

16_LLT 5.0.6

/ Improvements

Subject	Description
Close the Installed components list	Automatically close the Installed components list at terminal disconnection
Exclude the comments	Exclude the comments when counting catalogues items
Update the terminals list	Update the terminal association list, according to the USB Jungo 2.60 driver

/ Fixes

Subject	Description
Serial port is not released	Release the COM port after the LLT disconnection
Error when hiding the Details panel	An error occurred when hiding the file details, after selecting an offline drive

17_LLT 5.0.5

/ Improvements

Subject	Description
View installed packages	Add a new window in order to list the installed packages. The export to the clipboard, sorting and filtering package information are available
Uninstalling package	Allow uninstalling components of the terminal
Single instance editor	Use of single instance editor for Terminal observatory and Installed components
NTP T3 library	A new communication library version is integrated is this release

/ Fixes

Subject	Description
NullPointerException after displaying the Terminal observatory	Error fixed when opening the global Transfer tasks view, after consulting the Terminal observatory
Terminal identification	Workaround to the terminal range identification trouble: the fix allows the LLT to always identify the plugged terminal as Telium Tetra range
“Graphic is disposed” error	Fix of the error that occurs when reopening the LLT perspective in IngeDev (after closing it)
Plug-ins names	Some plug-ins names field where not correctly filled

18_LLT 5.0.4

/ Fixes and improvements

Subject	Description
Add a retry when transfer tasks failed	The failed transfer is automatically retried (transfer task is marked with a “R” icon)
Adapt the list of deleted files to fit the screen size	When a big amount of files is deleted at once, the list of files in the confirm dialog box didn’t fit screen size

19_LLT 5.0.3

The LLT version 5.0.3 is the first version to support Telium Tetra range. This new version brings a complete rework compared to the previous ones. It provides the user with new features such as:

- A full integration in IngeDev as a plugin
- An ergonomic standalone tool
- An enhanced command-line mode, allowing easy integration with external software tools requiring of download / upload capabilities
- A new auto-configured communication stack, which highly improves the user-experience based on a “ready to connect” solution

/ What is new?

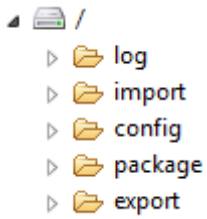
The LLT 5.0 proposes a unique mode to browse the terminal content, to consult its technical capabilities, and to retrieve terminal life-counters.

This version only embeds the Ingenico USB Jungo driver.

Please refer to the LLT 5.0 User guide in order to be aware of all features of this version.

/ Telium Tetra file tree structure

The Telium Tetra file tree structure differs from Telium 1 and 2. When the LLT browses the terminal content, a sand-box file system is now proposed as follow:



Directory	Description
/log	Contains system and applications logs files.
/import	**The parameters files can be downloaded into this directory.** This directory is called “HOST” in Telium 1 and Telium 2 terminals.
/config	Contains the configuration files of the terminal.
/package	**The application package files can be downloaded into this directory.** This directory is called “SWAP” in Telium 1 and Telium 2 terminals.
/export	This directory receives the non-sensitive data files from/to terminal applications. These files aim to be locally uploaded for further analyse.