

Add-on PCL for Android 1.30.00

Release Note

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1 Delivery

1_1 Purpose of this document

This document describes the content of the Add-on PCL for Android, a set of tools and libraries that allows an easy integration of Telium devices features inside business application developed on Android device.

Release: 1.30.00

Previous official release: 1.29.00

1_2 Scope

The “Add-on PCL for Android” is applicable to Android devices associated with any Ingenico Terminal providing that the Ingenico terminal:

- is running under the Telium 2 or higher operating system
- has one of the following communication means: Bluetooth, USB, RS232, Ethernet, Wi-Fi

This does not apply to iPP2xx as they do not have a multi-purpose processor.

1_3 Pre-requisites

1_3_1 Android prerequisites

The Android devices must run under OS version 2.3.4 or higher to use the Bluetooth connectivity.

To use the USB connectivity, OS version must be 3.1 or higher.

Although the Add-on should be compatible with any hardware devices running under Android, this cannot be an absolute certainty as some constructors modify the Operating System before installing it on their device. For instance, some issues related to the Bluetooth management have been found in Alcatel, Famoco and Lenovo devices and have been corrected in PCL Android 1.05.01 and higher.

Ingenico maintains a list of devices that has been tested. It covers all versions of Android (from 2.3.4 to 9) and most of the main constructors:

- Acer
- Alcatel
- Famoco
- Fujitsu
- HTC
- Huawei
- Lenovo
- LG
- Motorola
- Orange
- Samsung
- Sharp
- Sony / Sony-Ericsson
- Star

With USB, the Add-on has been validated with the following Android devices only:

- Samsung Galaxy S4
- Samsung Galaxy Tab3 (Android 4.2.2)

- HTC One (Android 4.4.3)
- Sony Xperia (Android 4.1.2)
- Google Nexus 5 (Android 5.1)
- Samsung Galaxy Alpha (Android 4.4.4)
- Samsung Galaxy S3 (Android 4.3)
- Samsung Galaxy S5 (Android 6.0.1)
- Motorola E4G (Android 5.0.2)
- Samsung Galaxy Tab2 (Android 4.1.2)
- Samsung Galaxy Tab (Android 4.0.4)
- Samsung Galaxy S7 (Android 7.0)
- Samsung Galaxy S8 (Android 9)

Samsung Galaxy Mini S3, S4 and S5 cannot be supported due to a hardware limitation.

With RS232, the Add-on has been validated with the following Android devices only:

- Caspit H10 (Android 4.4.4)

Don't hesitate to contact your support representative in case of issue with a specific device or if you want details on the specific models that have been tested.

1_3_2 Telium prerequisites

The recommended SDK to be installed on the Telium device is SDK 9.26 or higher.

The minimum SDK to be installed on the Telium device is SDK 9.10.

The following SDK components must be downloaded on the Telium device:

- OS
- Manager
- Link Layer With IP (included in Manager since SDK 9.16)
- SPMCI (813700xxxx and 844238xxxx catalogs)

1_4 Add-on content

1_4_1 Android packages

File name	Version	Description
PclTestApp.apk	1.48	Provide unit test functions of all the PCL features. Loop tests are also possible for some of them.
SpicesShop.apk	2.31	Example of how the sale application of a spice shop could look like.
PCLFileSharingSample.apk	1.27	Sample application demonstrating the PCL File Sharing features.

1_4_2 Android Java libraries

File name	Version	Description
PclServiceLib.jar	2.20.00	PclService library

PclUtilities.jar	2.20.00	PclUtilities library
PclServiceLib.aar	2.20.00	PclService android library
PclUtilities.aar	2.20.00	PclUtilities android library

1_4_3 Android native libraries

Android native libraries are provided for architectures armeabi-v7a, arm64-v8a and x86.

File name	Version	Description
libtlvtree.so		TlvTree native library
libpcltools.so		PCL Tools native library
libpclutilapi.so		PCL Utilities native library
libpclserial_port.so		Serial Port native library
libpclnetwork.so		PCL Network native library
libpclapi.so		PCL native library
libntpt3.so		PCL NTPT3 server library

1_4_4 Documentation

File name	Description
Documents\Getting Started with PCL for Android.pdf	User Guide
Documents\PCL for Android Integration Guide.pdf	Describes how to create an Android application using PCL
SDK\Javadoc*.javadoc	PCL libraries java documentation

1_4_5 Samples

In addition to the binary package of the sample, which can be found in the Package directory, source code used for the sample is also provided, to be used as an example when creating one's own application.

Directory name	Description
PclTestApp	Source code for the PclTestApp application that demonstrates how to use each of PCL functions

SpiceShop	The SpiceShop application is a sample of a check-out solution that can be used in a shop that sells spices
PCLFileSharingSample	Sample application source code demonstrating how to use the PCLFileSharing features in Kotlin programming language.

2 List of changes

2_1 Changes between versions 1.29.00 and 1.30.00

2_1_1 Evolutions

Internal ID	External ID	Description
TPCL-1675		Add doUpdate api with tms parameters as arguments
TPCL-1680		Avoid tms config loss on PclFileSharing fail
TPCL-1702		Add VID/PID for Desk1700
TPCL-1705		Add filesharing api to suspend and restart sessions

2_2 Changes between versions 1.28.00 and 1.29.00

2_2_1 Bug corrections

Internal ID	External ID	Description
TPCL-1671	SUPTER-11202	Fix memory leaks from PCLService and PclUtilities on application end
TPCL-1693		Fix build.gradle for samples
TPCL-1690		Fix crash after FileSharing fail to request files
TPCL-1686		Fix crash on WelcomeActivity landscape

2_2_2 Evolutions

Internal ID	External ID	Description
TPCL-1685		Close socket from socks server after fail to reach target
TPCL-1683		Support proxy socks for axiom
TPCL-1682		Add companion filter bar on WelcomeActivity

2_3 Changes between versions 1.27.00 and 1.28.00

2_3_1 Bug corrections

Internal ID	External ID	Description
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TPCL-1642	SUPTER-10623	Fix fortify mutex crash for stop on disconnected PCL session
TPCL-1645	SUPAPOS-3561	Fix reconnection from terminal TCP client
TPCL-1649		Avoid double close on PCL Wifi/Ethernet stop
TPCL-1665		Add Bluetooth permission check for SDK 31 and upper

2_3_2 Evolutions

Internal ID	External ID	Description
TPCL-1638		Add RX7000 VID/PID

2_4 Changes between versions 1.26.01 and 1.27.00

2_4_1 Bug corrections

Internal ID	External ID	Description
TPCL-1605		Stop immediately socks connection after close from terminal
TPCL-1620		Fortify ntp3 disconnection against crash on fd_set
TPCL-1622		Enable to reuse bridge after socket closed from terminal
TPCL-1623		doUpdate timeout fixed at 10min by default

2_4_2 Evolutions

Internal ID	External ID	Description
TPCL-1600	SUPTER-10076	Support Self 7000 and Self 8000
TPCL-1616	SUPTER-9527	Add timeout option to filesharing startAndDoUpdate and stop filesharing automatically on PCL doUpdate end
TPCL-1621		Send intent for application when doUpdate finish

2_5 Changes between versions 1.26.00 and 1.26.01

2_5_1 Bug corrections

Internal ID	External ID	Description
TPCL-1590	SUPTER-9964	Update TrustManager for Google Play requirements

2_6 Changes between versions 1.25.00 and 1.26.00

2_6_1 Bug corrections

Internal ID	External ID	Description
TPCL-1565	SUPTER-9715	Remove ReLinker from lib and use system loader if ReLinker is not included
TPCL-1574		Stop NTPT3 echo after filesharing start abort
TPCL-1572		Use wifi multicast to read ip terminal broadcast if CHANGE_WIFI_MULTICAST_STATE permission is granted
TPCL-1573		Fix detection of socket disconnection from terminal

2_6_2 Evolutions

Internal ID	External ID	Description
TPCL-1594	SUPTER-9770	Add option to configure timeout on doUpdate
TPCL-1577		Add api to get and set time zone and Daylight saving time

2_7 Changes between versions 1.24.02 and 1.25.00

2_7_1 Bug corrections

Internal ID	External ID	Description
TPCL-1530	SUPTER-9253	Fix usb locks and crash at PCL service stop
TPCL-1558		Fix lock with filesharing if tms client does not connect
TPCL-1555		Avoid indefinite pause for static and dynamic bridges
TPCL-1553		Fix crash on bt config with Bluetooth disabled

2_7_2 Evolutions

Internal ID	External ID	Description
TPCL-1556	SUPTER-9441	Add api to set a log listener
TPCL-1560		Add ntpt3 server traces for filesharing

2_8 Changes between versions 1.24.01 and 1.24.02

2_8_1 Bug corrections

Internal ID	External ID	Description
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TPCL-1547	SUPTER-9528	Fix crash fortify during bridge connection
TPCL-1543	SUPTER-9528	Fix crash fortify during bridge release

2_9 Changes between versions 1.24.00 and 1.24.01

2_9_1 Bug corrections

Internal ID	External ID	Description
TPCL-1532	SUPTER-9528	Fix network layer trace system
TPCL-1523		Avoid to send mobile network IP address during PCL over Wifi connection
TPCL-1473		Return from AddDynamicBridge when bridge is able to accept connection

2_9_2 Evolutions

Internal ID	External ID	Description
TPCL-1487		Add API GetPairedCompanions() and ActivateCompanion() with option to deactivate Ingenico mac address filter

2_10 Changes between versions 1.23.00 and 1.24.00

2_10_1 Bug corrections

Internal ID	External ID	Description
TPCL-1500	SUPTER-9108	Resolve dependencies between native libs
TPCL-1478	GRPGAPI-342	Set PCL start requesting task to sleep when PCL is connected
TPCL-1484	SUPTER-8947	Fix crash from bluetooth disconnection
TPCL-1471		Fix leak from fast network disconnect-connect
TPCL-1497		PCL start request through IP is send to target without broadcast

2_10_2 Evolutions

Internal ID	External ID	Description
TPCL-1486	GRPGAPI-563	Add vid pid for DX, EX and APOS
TPCL-1491	GRPGAPI-608	Add vid pid for PTP, MTP and mass storage USB mode on Landi terminals

TPCL-1493	GRPGAPI-608	Add vid pid for Lane3600, Link260, Desk2600
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2_11 Changes between versions 1.22.01 and 1.23.00

2_11_1 Bug corrections

Internal ID	External ID	Description
TPCL-1450	GRPGAPI-331	Fix crash from earlier bridge connection than terminal connection
TPCL-1451	GRPGAPI-417	Fortify PCL stop with IP connection
TPCL-1454		Notify usb driver errors with listeners
TPCL-1470		Set reusable the sockets for terminal ip detection

2_11_2 Evolutions

Internal ID	External ID	Description
TPCL-1464	SUPTER-8814	Support New BT MAC range "F4:01:18"
TPCL-1461		Support New BT MAC range "10:1E:DA"
TPCL-1411		Service handles NTPT3 abort from Terminal

2_12 Changes between versions 1.22.00 and 1.22.01

2_12_1 Bug corrections

Internal ID	External ID	Description
TPCL-1447	GRPGAPI-282	Ensure to finish Network exchange before communication close with terminal with disconnectPcl
TPCL-1453	SUPTER-8702	Fortify Bluetooth disconnection without service stop

2_13 Changes between versions 1.21.00 and 1.22.00

2_13_1 Bug corrections

Internal ID	External ID	Description
TPCL-1439	SUPTEL-14050	Incorporate usb driver in PCL Utilities library
TPCL-1442	SUPTER-8501	Adjust Network threads wakeup
TPCL-1431	SUPTER-8202	StopPcl function differentiates communication abort and Companion error

TPCL-1427		Protect PCL connection through USB against PclUtilities scan
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2_13_2 Evolutions

Internal ID	External ID	Description
TPCL-1446		Update Logs writing and SSL connection as required by http://cwe.mitre.org recommendations

2_14 Changes between versions 1.20.02 and 1.21.00

2_14_1 TCPL-931 Bug corrections

Internal ID	External ID	Description
TPCL-1407	GROTF-1042	Protect activation file against concurrent access
TPCL-1337		Avoid FileSharing shutdown due to move to another Activity
TPCL-1333		Fix LLT mode for PCLFileSharing
TPCL-1326		PclTestApp does not display device if name is empty
TPCL-1325		Fix landscape layout in PclTestApp
TPCL-1323		Fix Bluetooth thread issue multiple enabling/disabling
TPCL-1318		Unregister Receiver and Service Connection with PCLFileSharing.stop

2_14_2 Evolutions

Internal ID	External ID	Description
TPCL-1389	GROTF-981	Send message after each IP Terminal detection
TPCL-1399		Implement management for multiple USB devices
TPCL-1372		Explicit documentation for Transaction options
TPCL-1266		Use pcl bridge in full duplex and synchronize ppp

2_15 Changes between versions 1.20.01 and 1.20.02

2_15_1 Bug corrections

Internal ID	External ID	Description
TPCL-1375	SUPTER-13916	Fix USB disconnection after pause

2_16 Changes between versions 1.20.00 and 1.20.01

2_16_1 Bug corrections

Internal ID	External ID	Description
TPCL-1375	SUPTER-13916	PCL reconnect if paused over 5s or more
TPCL-1162	SUPTER-5352	Keep PCL service running but ask for internal restart

2_17 Changes between versions 1.19.02 and 1.20.00

2_17_1 Bug corrections

Internal ID	External ID	Description
TPCL-1331	SUPTER-7426	Remove CRLF sequences from logs
TPCL-1299		Fix crash during USB reconnection
TPCL-1288		Fix socks connection after DNS resolution
TPCL-1344		Fix crash after connection closed by terminal

2_18 Changes between versions 1.19.01 and 1.19.02

2_18_1 Bug corrections

Internal ID	External ID	Description
TPCL-1278		Fix crash on disconnect
TPCL-1279		Fix return values for getLastInfo
TPCL-1281		Fix crash on multiple reconnection

2_19 Changes between versions 1.19.00 and 1.19.01

2_19_1 Bug corrections

Internal ID	External ID	Description
TPCL-1250	GROTF-708	Minimize long operations number using logToFile
TPCL-1231	SUPTER-6916	Fortify mutex gestion
TPCL-1222	SUPTER-6916	Start PCL service in foreground for android 9 and later

TPCL-1259	SUPTCL-13612	Update filter for logcat
TPCL-1261		Escape '%' for traces after usb reception

2_19_2 Evolutions

Internal ID	External ID	Description
TPCL-1249	GROTF-706	Add API to shutdown and restart PCL

2_20 Changes between versions 1.18.01 and 1.19.00

2_20_1 Bug corrections

Internal ID	External ID	Description
TPCL-1246		Avoid IP connection try without network
TPCL-1244	SUPTCL-13763	Add timeout 1s after pcl stop

2_20_2 Evolutions

Internal ID	External ID	Description
TPCL-1248	SUPTCL-6785	Add an API to get last info for supported API (code error for doUpdate)
TPCL-1237		Make Internal Libraries' class not public

2_21 Changes between versions 1.18.00 and 1.18.01

2_21_1 Bug corrections

Internal ID	External ID	Description
TPCL-1226	SUPTCL-6916	Mutex destruction fortified
TPCL-1215	SUPTCL-13612	Add filter for log writing
TPCL-1219	SUPTCL-13691	Fix crash when no more sockets are available
TPCL-1200	SUPTCL-6608	Add test for length before buffer use

2_21_2 Evolutions

Internal ID	External ID	Description
TPCL-1236		Add an API to stop PCL on the reader

TPCL-1221	SUPTER-6785	Add an API to install and delete component on offline mode
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2_22 Changes between versions 1.17.00 and 1.18.00

2_22_1 Bug corrections

Internal ID	External ID	Description
TPCL-1191	SUPTER-6425	Fix crash with getUSBCompanion
TPCL-1198	SUPTER-6450	Fortify pcl stop to fix crash
TPCL-1166		Fix crash with SSL connexion
TPCL-1171		Fix crash with GetSPMInfo during reconnection
TPCL-1174		Fix crash with SSL connexion fail
TPCL-1199		Fix crash on USB reconnection

2_22_2 Evolutions

Internal ID	External ID	Description
TPCL-1165	SUPTER-6008	Add section for Android8/9 behavior in integration guide
TPCL-1185	SUPTER-6191	Add USB VID/PID for Open1500
TPCL-1104	SUPTER-13148	Log files enabled to be stored into a custom directory
TPCL-1133		Add mutual SSL authentication
TPCL-1163		AppTest increase result display for getComponentsInfo
TPCL-1197		Add easy pairing in sample

2_23 Changes between versions 1.16.01 and 1.17.00

2_23_1 Bug corrections

Internal ID	External ID	Description
TPCL-1152	SUPTER-5925	Fix API AddAuthorizedVidPid
TPCL-1126	SUPTER-13339	Fix data loss issue when socket closed by remote peer
TPCL-1101		Fix crash in callback shouldCutPaper of PCLTestApp
TPCL-1107		Fix load of p12 certificate in asset application Test

TPCL-1113		Fix Issue when download some file by TEM on RS232 link
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2_23_2 Evolutions

Internal ID	External ID	Description
TPCL-1121	SUPTER-5925	Add USB VID/PID of Lane3000
TPCL-1108		Support new MAC address range (38:EF:E3)

2_24 Changes between versions 1.16.00 and 1.16.01

2_24_1 Bug corrections

Internal ID	External ID	Description
TPCL-1097	SUPTER-5411	Update version return by "getAddonVersion()" API

2_24_2 Evolutions

Internal ID	External ID	Description
TPCL-991		Increase DoTransactionEx size of buffer to 64kB.
TPCL-1093		Use new GetHosByName function manage IPV6 address.

2_25 Changes between versions 1.15.01 and 1.16.00

2_25_1 Bug corrections

Internal ID	External ID	Description
TPCL-1048	SUPTTEL-13060	Add work around for reconnection issue.
TPCL-1073	SUPTTEL-13159	Manage remote download via PPP over a full IPV6 network.
TPCL-1065	SUPTTEL-13214	Fix bridge Android to Telium.
TPCL-1035	SUPTTEL-13074	Fix an issue when connecting to a hostname on an IPV6 network with PPP.
TPCL-1071		Fix problem Bridge OpenOS To Telium when connect fail
TPCL-1041		Fix GetComponat buffer size for new Tetra component list

2_25_2 Evolutions

Internal ID	External ID	Description
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TPCL-1044		Add Save/Restore TMS parameters after stop FileSharing.
TPCL-1038		Improve RS232 management

2_26 Changes between versions 1.15.00 and 1.15.01

2_26_1 Bug corrections

Internal ID	External ID	Description
TPCL-1021		Fix connection error after terminal reboot
TPCL-1004	SUPTTEL-13052	Fix getUsbCompanion return bad USB device.
TPCL-928	SUPTTEL-3703	Fix download big size file with PCLFileSharing API.

2_26_2 Evolutions

Internal ID	External ID	Description
TPCL-1016		Add PCL state in Ntpt3Test
TPCL-1014	SUPTTEL-13074	Add support IPv6 for hostname in socks server PCL

2_27 Changes between versions 1.14.00 and 1.15.00

2_27_1 Bug corrections

Internal ID	External ID	Description
TPCL-961	SUPTTEL-12644	Fix crash PCL Service library.
TPCL-974	SUPTTEL-4152	Fix USB connection stuck.
TPCL-1005	SUPTTEL-13075	Fix load shared library on Android 4.2 and older
TPCL-998	SUPTTEL-12942	Add warning in documentation.
TPCL-923	SUPTTEL-12756	Fix application spicesshop
TPCL-973	SUPTTEL-4169	Update "current" parameter in callback OnUpload.

2_27_2 Evolutions

Internal ID	External ID	Description
TPCL-929	SUPTTEL-4106	Improve PCL bridge to accept more than 1 TCP/SSL connections on same port.

TPCL-951		Add hardware flow control on Android famoco serial solution
TPCL-948		Remove ABI "armeabi". No supported longer by Google NDK.
TPCL-942		Add keep alive in NTPT3.

2_28 Changes between versions 1.13.00 and 1.14.00

2_28_1 Bug corrections

Internal ID	External ID	Description
TPCL-901	SUPTEL-12625	Fix native libraries size.
TPCL-895	SUPTEL-12562	Fix crash when scanning QR code with % character.
TPCL-899	SUPTEL-12390	Fix close file when get terminal components call.

2_28_2 Evolutions

Internal ID	External ID	Description
TPCL-903		Integration of the NTPT3 server on the PclService library in order to allow file sharing between an Android device and a Telium device.
TPCL-908		Add a Power Off command to the PclService library.

2_29 Changes between versions 1.12.03 and 1.13.00

2_29_1 Bug corrections

Internal ID	External ID	Description
TPCL-851	SUPTEL-12031	Improve barcode reader closing to avoid PclService freeze
TPCL-737	SUPTEL-10768	getUsbCompanion and getUsbCompanions return the activated device even if PclService has started
TPCL-880	SUPTEL-12372	Fixed crash in doTransactionEx (removed extended data logging)
TPCL-886	FAS-236	Fix max opened socket.
TPCL-870	SUPTER-2456	Fix DoTransaction at same time of BT disconnection.

2_29_2 Evolutions

Internal ID	External ID	Description
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TPCL-802	SUPTTEL-11840	Provide a new method to open a cash drawer (connected to an external printer)
TPCL-834	SUPTTEL-11920	Add AAR format in deliver PCL android
TPCL-816	SUPTTER-2132	Provide native libraries for x86_64 architecture

2_30 Changes between versions 1.12.02 and 1.12.03

2_30_1 Bug corrections

Internal ID	External ID	Description
TPCL-876	SUPTTEL-12378	Fix serial port library conflict (renamed libserial_port.so in libpcl_serial_port.so)

2_31 Changes between versions 1.12.01 and 1.12.02

2_31_1 Bug corrections

Internal ID	External ID	Description
TPCL-868	SUPTTEL-12291	Fix issue related to getFullSerialNumber with T2 terminals
TPCL-863	SUPTTER-2700	Fix reconnection issue with Android TC55 device

2_31_2 Evolutions

Internal ID	External ID	Description
TPCL-871	SUPTTER-2132	Provide native libraries for x86 architecture

2_32 Changes between versions 1.12.00 and 1.12.01

2_32_1 Bug corrections

Internal ID	External ID	Description
TPCL-855	SUPTTER-2440	Increase default timeout for reception of answers to messages sent to the terminal (because terminal wake-up can take up to 7 seconds)
TPCL-857	SUPTTEL-12102	Fix slowdown on RS232 interface

2_33 Changes between versions 1.11.00 and 1.12.00

2_33_1 Evolutions

Internal ID	External ID	Description
TPCL-793	SUPTER-11546	RS232 support with android_serialport_api.

2_34 Changes between versions 1.10.00 and 1.11.00

2_34_1 Evolutions

Internal ID	External ID	Description
TPCL-772	SUPTER-1712	Documentation: Add a paragraph in "Getting Started" document to indicate that PCL over TCP/IP interface is not supported through BEM base.
TPCL-308		Clarify SSL connection usage in documentation (section 4.3.5 in Integration Guide)
TPCL-731	SUPTTEL-11350	Add support for arm64-v8a in native libraries
TPCL-804		Support new MAC address range (B4:00:16)
TPCL-785		Improve reconnection time in IP mode
TPCL-724		Support direct connect in PCL over IP (with Tetra terminals only)
TPCL-698		PclTestApp now allows to add a bridge without sending/receiving data (just leave packet size and packets number edit boxes empty)

2_34_2 Bug corrections

Internal ID	External ID	Description
TPCL-738	SUPTTEL-11452	Fix occasional crash in IpThread and BluetoothThread when stopping PclService
TPCL-750	SUPTTEL-11095	It is now possible to activate a companion after PclService has been started (it was already the case in add-on 1.06 with Bluetooth companions). However when you change the activated companion you still need to stop and restart PclService.
TPCL-752	SUPTTEL-11513	Explicitely load native tlvtree and pcltools libraries in PclUtilities
TPCL-759	SUPTTEL-11613	Remove use of deprecated MODE_WORLD_READABLE and MODE_WORLD_WRITEABLE to work with Android N (API 24)

TPCL-777	SUPTTEL-11699	READ_PHONE_STATE permission is no more required in applications embedding PclServiceLib.jar. However it is needed if you use Telium SPMCI API PDA_get_comm_periph_state to retrieve GPRS SIM number.
TPCL-794	SUPTTEL-11802	Fix issue with WiFi connection establishment
TPCL-783	SUPTTEL-11634	Fix issue when a message with a special character (%) is received from the terminal.
TPCL-796	SUPTTEL-11690	First call to AddDynamicBridge now works
TPCL-426	SUPTTEL-6127	Increment pause between Bluetooth connection tries to avoid disturbing WiFi communication (1, 2, 4, 8 seconds)
TPCL-746		Link2500 is now detected when using USB interface (USB devices are now filtered only by the vendor id in PclTestApp)
TPCL-813		Fix occasional dead lock when switching from an IP terminal to a Bluetooth terminal.

2_35 Changes between versions 1.08.00 and 1.10.00



The use of PclService library version is mandatory in order to publish application because only one APK by application is allowed.
So PclService is no longer provided as an Android package. Only PclService library version is provided.

2_35_1 Evolutions

Internal ID	External ID	Description
TPCL-585 TPCL-699 TPCL-700 TPCL-701 TPCL-706 TPCL-736	-	Support Generic IP solution
TPCL-693	-	Add support for Link2500 on USB interface
TPCL-694	-	PclService is no more delivered as an autonomous service but only as a library
TPCL-695	-	Provide APIs to add new VID/PID or Bluetooth address range
TPCL-579	SUPTTEL-10613	Generate log files for debug purposes
TPCL-556		Add support for UPC-E1 barcode reader symbology (this requires appropriate BCR dll and SPMCI components on Telium side, ie. SDK 9.28 or higher)

2_35_2 Bug corrections

Internal ID	External ID	Description
TPCL-599	SUPTER-1612	Fix long connection issue with Tetra terminals
TPCL-704	-	Fix crash in shouldPrintText callback
TPCL-616	SUPTTEL-10803	Fix crash when printing an image from terminal with odd size
TPCL-722	SUPTTEL-11186	Fix PclService crash due to memory leak in BluetoothSocket file descriptors handling in Android system
TPCL-729		Fix "Get full serial number" test case with Tetra terminals in PclTestApp
TPCL-742		Do not block while detecting an USB terminal that traces on USB port

2_36 Changes between version 1.07.00 and 1.08.00**2_36_1 Evolutions**

Internal ID	External ID	Component	Description
TPCL-716	-	PclUtilities	Add support for Link2500 (Bluetooth interface)

2_36_2 Bug corrections

Internal ID	External ID	Component	Description
TPCL-711	SUPTTEL-10683	PclService	Fix bridge connection issue
TPCL-712 TPCL-575	SUPTTEL-10432	PclService	Use hardcoded 127.0.0.1 IP address for localhost (gethostbyname issue)
TPCL-713	SUPTTEL-10925	PclService	Fix crash in barcodeEventExt when reading barcodes with special characters (%)
TPCL-714	SUPTTEL-10960	PclService	Pause 1 second between connection tries to Bluetooth server to avoid unnecessary TCP connections on port 5184

2_37 Changes between versions 1.06.02 and 1.07.00**2_37_1 Evolutions**

Internal ID	External ID	Component	Description
TPCL-523 TPCL-548	-	All	Support of the USB interface

TPCL-478	SUPTTEL-9076	All	Provide an API to enable/disable PclService logs
TPCL-460	-	All	Provide an API to retrieve the terminal battery level
TPCL-524	-	Pcl Test Applications	Inactivity timeout in Open Barcode Reader test is now in minutes
TPCL-420	SUPTTEL-8836	All	Provide an API to get the add-on version
TPCL-530		PclService	PclService notifications now respect Android graphical chart
TPCL-549			Replace IngenicoBtPairing application with iSelection application. This new application allows selecting USB or Bluetooth companion but doesn't provide Bluetooth pairing feature (use the System one).

2_37_2 Bug corrections

Internal ID	External ID	Component	Description
TPCL-529	SUPTTEL-5912	PclService	Fix issue in TCP/IP stack that could lead to remote download failures or SSL MAC error on companion side.
TPCL-525	SUPTTEL-9818	PclService	Fix system crash on barcode reader inactivity timeout
TPCL-513	SUPTTEL-9692	PclServiceLib	Fix version mismatch
TPCL-493	SUPTTEL-9497	Doc	Document barcode reader inactivity timeout parameter unit
TPCL-489	SUPTTEL-9004	PclUtilities	Provide a new API to get the correct state of the activated companion
TPCL-487	SUPTTEL-9510	PclService/PclTestApp	It is now possible to enable all barcode reader symbologies.
TPCL-522	SUPTTEL-9500	PclService	Fix PclService crash due to memory leak in BluetoothSocket file descriptors handling in Android system
TPCL-542			Fix package installation issue on Galaxy Tab 2 (signature issue)
TPCL-538	SUPTTEL-9810	PclService	Increase sendMessage answer timeout to avoid erroneous return when companion is trying to connect to an unavailable printer
TPCL-430	SUPTTEL-8766	PclService	Improve connection from Android device to Telium terminal through bridge
TPCL-545	SUPTTEL-10068	Doc	Remove restriction on SDK version for Scan and Pair method
TPCL-358		Doc	Font ISO8859-15 must be loaded on terminal to print accentuated characters

TPCL-547	SUPTEL-9803	Doc	Remove VISA mentions in documentation
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2_38 Changes between versions 1.06.00 and 1.06.02

2_38_1 Evolutions

Internal ID	External ID	Component	Description
TPCL-412		PclService	Provide reverse lookup feature (requires Telium SDK 9.22 or higher)
TPCL-409	SUPTEL-8201	PclService	Provide an API to control the backlight on the companion (requires Telium SDK 9.22)
TPCL-406	SUPTEL-8977	PclUtilities	Provide class description in the javadoc
TPCL-394	SUPTEL-8978	PclService	Add Symbologies to the javadoc
TPCL-384	SUPTEL-8591	PclService	Provide an API to select Telium font for printing (ISO8859 fonts only) (requires Telium SDK 9.22)
TPCL-434		libpclapi.so	Handle GetHostByName request from Telium
TPCL-399		PclTestApps	Rename the IPA Printer test in Print from Telium
TPCL-397		PclTestApps	Add a dedicated menu for signature capture
		Native libraries	Improve traces for a better understanding of the bridge function
		PclTestApps	Fix minor layout issues

2_38_2 Bug corrections

Internal ID	External ID	Component	Description
TPCL-423 TPCL-401 TPCL-360	SUPTEL-8866 SUPTEL-8528	PclService	Fix issue occurring when Bluetooth link is cut during long operation (transaction, remote download)
TPCL-408		PclService	Fix issue in launchM2OSShortcutAPI
TPCL-407	SUPTEL-8744	PclService	addDynamicBridge was returning an error in a working case
TPCL-351	SUPTEL-7615	PclService	Fix issue when exiting application while a long running operation is in progress (DoTransaction for instance)
TPCL-436		PclService	Increase DoTransactionEx output buffer size
TPCL-437	SUPTEL-8861	libpclnetwork.so	Implement TCP keep-alive
		SpicesShop	Fix issue with euro (€) character

2_39 Changes between versions 1.05.01 and 1.06.00

2_39_1 Evolutions

Internal ID	External ID	Component	Description
TPCL-365		Documentation	Improve javadoc
TPCL-359		PclService	Provide new printing callback with raw text and charset
TPCL-329		PclService	Provide new APIs to read/write TMS parameters
TPCL-325		PclService	Provide a new API to get Telium SPMCI component version
TPCL-323		PclService	Provide a function to get the Android PCL add-on version from Telium
TPCL-318		PclService	Provide a new API to open the barcode reader with inactivity timeout. An event is broadcasted when the barcode reader is closed on inactivity timeout.
TPCL-366		PclService	Provide new APIs to configure barcode reader from Android device.
TPCL-376		Native libraries	Provide native libraries for armeabi-v7a architecture

2_39_2 Bug corrections

Internal ID	External ID	Component	Description
TPCL-367	SUPTTEL-7511	PclService	Remote download fails with big files
TPCL-356		PclService	PclService crashes with new ART runtime (replacing Dalvik)
TPCL-347	SUPTTEL-7773	PclService	Unexpected prefix data to a scanned GS1-128 barcode
TPCL-339	SUPTTEL-7405	PclService	Segmentation fault when passing null parameters to DoTransactionEx
TPCL-379	SUPTTEL-8482	PclService	Fix issue with addDynamicBridge
TPCL-357	SUPTTEL-8087	Documentation	Provide SpicesList.pdf

2_40 Changes between versions 1.05.00 and 1.05.01

This version is a bug fix release.

2_40_1 Evolutions

NONE

2_40_2 Bug corrections

Internal ID	External ID	Component	Description
TPCL-319	SUPTEL-7131	PclService IngenicoBtPairing	Fix Bluetooth connection issue with some smartphones/tablets (Wiko, Alcatel One Touch, Lenovo)
TPCL-335		PclService	Provide a new API to add the dynamic bridge on localhost only. Bind internal sockets to localhost only.
TPCL-336		PclService	Establish the Telium connection as soon as the Android connection is done
TPCL-313		IngenicoBtPairing	Support for screen rotation on xlarge devices.
		IngenicoBtPairing	“Activation in progress” is displayed during terminal activation
		PclService	Fix issue in socket pool management
		PclTestApp PclTestAppWithLib	Test “Store Logo” accepts only bmp files
		PclTestApp PclTestAppWithLib	Fix layout issue

2_41 Changes between versions 1.04.01 and 1.05.00

2_41_1 Evolutions

Internal ID	External ID	Component	Description
FT14936	SUPTEL-6122	PclService	Set network mask to 255.255.255.252 on PCL PPP interface
FT15446	SUPTEL-6348	PclService	Manages up to 5 concurrent connections through socks server. This especially allows doing FTP connections in passive mode to a remote FTP server.
FT15581	SUPTEL-5832	PclService	Supports DNS in socks server. On Telium side, this feature requires SDK 9.14 and usage of LinkLayer.
FT15585		PclService	Manage connection timeout in socks server. On Telium side, this feature requires usage of LinkLayer.
FT15785	SUPTEL-5571	PclService	Support PNG and JPG images in new printBitmapObject API
		IngenicoBtPairing	Add iCMP picture

2_41_2 Bug corrections

Internal ID	External ID	Component	Description
FT14935	SUPTEL-5821	PclService	Fix issue when adding dynamic bridge
FT15287	SUPTEL-6151 SUPTEL-6405	PclService	Remove infinite while loop when socket error occurs
FT15686	SUPTEL-6617		Fix issue after several connections between Android and Telium
FT15481	SUPTEL-6641	PclTestApp, SpicesShop	Building Android application using PCL aidl files now succeeds with IntelliJ IDEA and Android Studio
FT15636	SUPTEL-6337	IngenicoBtPairing	Scan&Pair now works on recent devices with Android 4.x
FT15854		PclService	printLogo and storeLogo APIs now return error if logo name has more than 8 characters
	SUPTEL-6795	IngenicoBtpairing	Fix spelling mistake

2_42 Changes between versions 1.04 and 1.04.01

2_42_1 Evolutions

Internal ID	External ID	Component	Description
FT14996		PclService	Add the getFullSerialNumber API to retrieve the full serial number of the Companion. This feature requires SPMCI component from SDK 9.12 or higher.
		All	Add component version in log tags.

2_42_2 Bug corrections

Internal ID	External ID	Component	Description
FT15365 FT15366	SUPTEL-5591	PclService	Fix reconnection issue when Companion leaves sleep mode or when PclService is restarted. Internal TCP port used by PclService is now 5184 instead of 53535.
	PCL-84		Fix stability issue (BluetoothSocket closing)
			Fix NullPointerException when PclService is restarted by Android.
		PclServiceLib	signatureTimeoutExceeded callback was not called

2_43 Changes between versions 1.03 and 1.04

2_43_1 Evolutions

Internal ID	External ID	Component	Description
FT14497	PCL-1, PCL-28, PCL-30	PclService	Add printing functions from Telium. This feature requires SPMCI component from SDK 9.12 or higher.
FT14500	SUPTEL-5627	PclService	Print accentuated and special characters correctly on Telium terminal. This feature requires SPMCI component from SDK 9.10 or higher.
FT14518	PCL-32, PCL-35, PCL-38	PclService	New feature to request signature capture and to add signature to a receipt. This feature requires SPMCI component from SDK 9.12 or higher.
FT14676	PCL-64	PclService	New feature to define start and end of receipt to be printed on OpenOS.
	PCL-4	PCLService, PCLUtilities	PCL features are now also provided as independent jar libraries, to help the integration in an Android application
FT14821	PCL-47	PCLUtilities	Add an API for paired devices list and selection.

2_43_2 Bug corrections

Internal ID	External ID	Component	Description
FT14527	SUPTEL-5873	PclService	Extended data was not filled correctly in doTransactionEx response
FT13905	-	PclService	Fix connection issue with Galaxy Y
FT14607	-	PclService	DoTransactionEx now supports extended data response up to 16kbytes
FT14434	-	PclService	Fix PclService crash issue after many unsuccessful <i>Bluetooth</i> connection attempts
FT14540	PCL-24	Doc	Link missing in javadoc

2_44 Changes between versions 1.02 and 1.03

2_44_1 Evolutions

Internal ID	External ID	Component	Description
-	-	Android/PclService	Provide an API to use / configure the IP bridge for a direct access Android -> Telium or Telium -> Android
-	-	Android/PclService	Local download compatibility with TMS Agent
		Android/PclService	Add the isPrinterConnected API
		Android/PclTestApp	Complete layout redesign for better support of all screen sizes
		Android/BtPairing	Layout redesign for small screens
FT13664	-	Telium/SPMCI	Information about printer low-battery (available from SDK 9.8.0 only)
FT13674	-	Telium/BTPAIRING	Ability to give a user friendly name to the Companion (displayed on Android side). Note that when using this feature, the specific logo displayed on Android side will no longer match the paired device, as there is no longer a way to make the distinction between iWL or iSMP
FT13574	-	Telium/SPMCI	Support of default symbologies (QRCode)
FT13665		Telium/SPMCI	Support for connectivity to Android and iOS devices

2_44_2 Bug corrections

Internal ID	External ID	Component	Description
-	-	Android/BtPairing	Fix issue with Bluetooth Pairing with Android 4.0.3 and 4.0.4

2_45 SSL v3



Please note that SSL v3 is now deprecated due to “Poodle” issue (10/2014).

Mobile Payment Application Developers must update and distribute a new version of applications with a new protocol mask that allows TLSv1.2 and TLSv1.1 and forbids TLSv1.0 and all SSL versions. For example, Telium Payment Applications using PCL Communication channel to connect their payment gateway must now comply with this requirement.

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