



beyond
payment

Readme

OPOS Integration Kit for the Ingenico Telium 2 IK-OPOS-04.00

Release November 11th, 2011

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1. Overview

IK-OPOS-04.00 provides support for developing OPOS compliant application interfacing with Ingenico's ISC250/ISC350 signature capable and the iPP320/iPP350 non-signature capable devices. Our OPOS solution supports the following OPOS Control Objects for the following device classes:

- **SignatureCapture (iSC250 and iSC350)**
- **LineDisplay**
- **PINPad**
- **MSR**

2. IK-OPOS-04.00 Contents

Ingenico's OPOS Integration Kit IK-OPOS-04.00 contains the following software and documentation.

2.1. Ingenico Documents

- **DIV350784 Rev A iPP300 Operation and Product Support Guide.pdf**
- **DIV350783 Rev C iPP300 Installation and Quick Reference Guide.pdf**
- **DIV350825_Rev_C_UPOS_Developers_Guide_v1.0.pdf**
- **DIV350774 Rev B iSC350 Operation and Product Support Guide**
- **DIV350773 Rev A iSC350 Installation and Quick Reference Guide.pdf**
- **DIV350840 Rev A Telium Tools Install Guide.pdf****DIV350823 Rev A**
- **ISC250 Operation and Product Support Guide.pdf**
- **DIV350827 Rev C Telium Download.pdf**
- **DIV350824 Rev A iSC250 Installation and Quick Reference Guide.pdf**

2.2. Telium OPOS Software

Telium OPOS software contains the Ingenico OPOS driver setup files including silent installation option.

2.3. Telium UIA Terminal Application

Package contains UIA App release 1.5.0 for both the IPP3xx and ISCx50 devices. Production signed software packages are provided which can only be used on production profiled unit. Package includes three downloadable formats; LLT, USB (iSCx50 only), and OGZ.

- **Production Profile LLT Package**
- **Production Profile OGZ Package**
- **Production Profile USB Package (ISC250 and ISC350 only)**

2.4. Telium Utilities

Package contains Windows and Telium terminal supporting tools.

- **OPOS Test App 1.4.5.1**

Telium OPOS test application setup file supporting IPP3xx and ISCx50. Please refer to **DIV350825_Rev_C_UPOS_Developers_Guide** for details on OPOS test app functionality.

- **Telium LLT (LOCAL DOWNLOAD) release 4.4.6**

Download utility for Windows supporting local download of Telium software packages.

- **Telium USB Driver**

The directory contains a separate USB driver for Telium devices. Package contains both the driver files and an installer.

- **Telium Tools release 1.5.0**

Telium Utilities use for creating forms, scripts, and packages to be used on supported Telium devices. Please refer to Telium Tools user's guide for details. User may access the help file from help menu and the help icon. Telium tools installed components includes;

- Form Builder 1.5.0
- Data Packaging Tool 1.5.0
- Script Builder 1.5.0
- SAT 1.5

- **UIA Data Samples and Configuration Files**

Sample forms, images, prompt files and communication files for both IPP3xx and ISCx50.

3. OPOS drivers Setup Notes

The set up file, “OPOS for the Ingenico Telium2 v1.4.5.1.exe” installs and registers the appropriate OCXs and DLL. The installation directory contains these OCXs, Ingenico Telium service object, and supporting files.

- Standard OPOS controls 1.13
 - OPOSLineDisplay.ocx
 - OPOSMSR.ocx
 - OPOSPINPAD.ocx
 - OPOSSigCap.ocx
- Ingenico eNFormSigDisplay.ocx (For signature rendering)
- IngSC350SO.DLL (Ingenico’s Telium Service Object)
- IngenicoConfiguration.xml
- DirectIO.h (Direct IO Header file)
- DirectIO.properties (UIA supported Direct IO command)
- Batch file to register or unregister package OCXs.

Please refer to the installation instructions in UPOS developers Guide for details. The document is located in the Ingenico Documents directory within the kit.

4. Telium Tools Setup Notes

Setup_TeliumTools_1.5.0.1.exe installs Form Builder, Data Packaging Tool, Script Builder, and SAT (If not presence). .Net Frameworks 3.5 is required. Setup checks this pre-requisite and prompts for Web installation if not present in the host system. Please refer to “DIV350840 Rev C Telium Tools Install Guide.pdf” for detail installation guide. Form Builder, Data Packaging tool, and Script Builder help files are integrated in the installation and can be access via each application help menu and icons.

To run these installed utilities:

Start->Program Files->Ingenico->Telium Tools

5. OPOS Test App Setup Notes

The setup file, “SETUP_OPOSTestApp_1.4.5.1.exe” installs The OPOS Test Application. OPOS Test App looks for the DirectIO.properties in the installation path of the OPOS drivers.

Run the OPOS Test Apps from the Start->All Programs->Ingenico->OPOS Test App

Make sure the device has been setup to communicate with the OPOS driver by configuring both the terminal and the Control Panel App (Refer to the UPOS developers Guide for details)

6. Loading Terminal Software Package

Downloading the device software package can be done either via LLT download tools, Direct IO at runtime or external USB memory (ISC250and ISC350 Only).

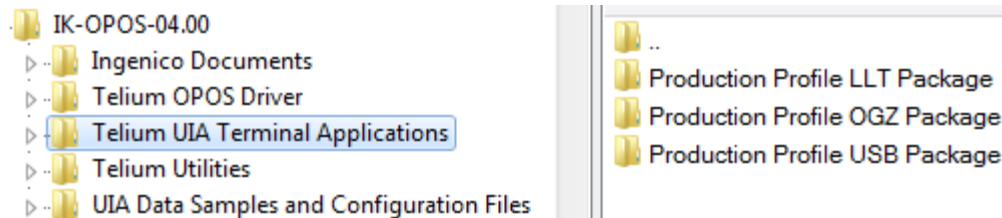
Please note that all of the terminal software packages provided in this kit are intended for unit that has already been prepared and injected appropriately. They are not intended for a factory unit. All downloadable packages included in this kit are intended for a production profile unit only.

Please note that The Telium device may come in two different flavors

- Production profile - [0248-014]
 - Device does not flash any warning sign. Boot up screen displays
- Mockup profile (Normally use for development as it has minimal security restrictions)
 - Device has unmistakable flashing of the warning sign as shown below.



The downloadable UIA device package included in the Kit contains production profile packages as shown below.



6.1. LLT Download

!! IMPORTANT !!

MOCKUP [0035-001] downloadable package MUST ONLY be used on a mockup profile unit.

PRODUCTION [0248-014] downloadable package MUST ONLY be used on a production profile unit.

Failing to do so will render device in an unrecoverable state that will require sending the unit back to Ingenico to be factory reset.

Download packages provided in this kit is intended only for the purpose of updating the existing production profiled unit.

Please make sure LLT has been installed and configured correctly. Please refer to the **LLT User's Guide.pdf** provided in the LLT4.4.6 directory for installation and configuration guide.

Download is triggered by batch script calling the LLT execution via command line.

Each release package includes a download batch script;

- “LLT_LOAD.BAT”

1. Please use the following table for shortcut guide to putting the device in the desired mode.

Functions	IPP3xx	ISC350
Delete all but system	F1 F4 F2 F3	'1' '3' '4' '6' key sequence
Software upgrade through mass storage	NA	'4' key
Reset terminal	',' Key & yellow key	',' key and yellow key (Clear)
Access to Telium Manager (At UIA or RBA splash screen)	'2' '6' '3' '4' 'Enter' 'F1'	'2' '6' '3' '4' 'Enter' '+'

2. Delete all but the system by following the following sequence
Reset terminal→hold down '1' or 'F1' for appropriate terminals while device is booting up→ when the screen displays the first asterisk "*" quickly press the next three key in sequence. This action will put the unit in the 'LLT' mode
3. Double click the “LLT_LOAD.BAT” batch file. The screen shots below shows an example of production PK package loading sequences. Please note that part number, profile and the device type may change depending on the package selected. The download occurs in two stages. The first package will load the OS components, profile (If production), Manager in “Package 1 of 2” as indicated in the screen shot below.

```

#####
PART# : [ PK-UGEN05-0143A ]
INTERNAL CONTACTLESS : NOT CONFIGURED
SECURITY PROFILE: PRODUCTION_ISC350
PACKAGE 1 OF 2
#####
Latest LLT Installation detected in [ C:\Program Files\TELUM Tools\LLT 4.4.6\ ]
ENTER COM PORT# or [ENTER] for COM1 :

```

4. Enter COM number that has been pre-configured for the host system and press enter

```

#####
PART# : [ PK-UGEN05-0143A ]
INTERNAL CONTACTLESS : NOT CONFIGURED
SECURITY PROFILE: PRODUCTION_ISC350
PACKAGE 1 OF 2
#####
Latest LLT Installation detected in [ C:\Program Files\TELUM Tools\LLT 4.4.6\ ]
ENTER COM PORT# or [ENTER] for COM1 :6
MAKE SURE DEVICE IS SET TO "LLT" MODE
PRESS ENTER WHEN "LLT" IS DISPLAYED ON DEVICE SCREEN...

```

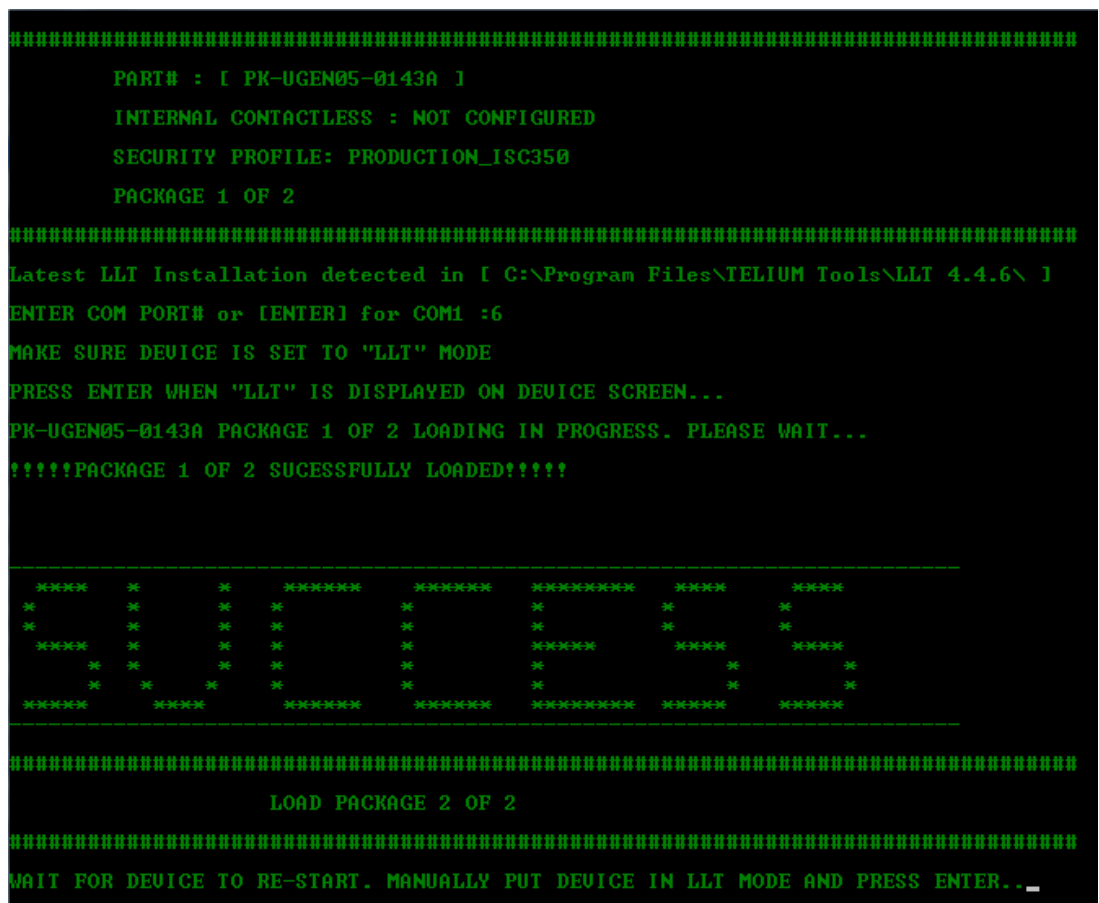
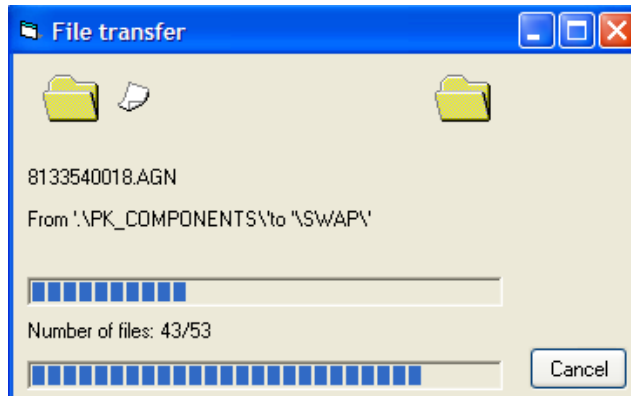
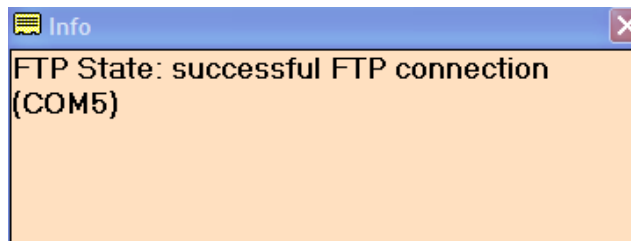
5. Prompt user to make sure the device is currently set to “LLT” mode. Press enter to continue

```

#####
PART# : [ PK-UGEN05-0143A ]
INTERNAL CONTACTLESS : NOT CONFIGURED
SECURITY PROFILE: PRODUCTION_ISC350
PACKAGE 1 OF 2
#####
Latest LLT Installation detected in [ C:\Program Files\TELUM Tools\LLT 4.4.6\ ]
ENTER COM PORT# or [ENTER] for COM1 :6
MAKE SURE DEVICE IS SET TO "LLT" MODE
PRESS ENTER WHEN "LLT" IS DISPLAYED ON DEVICE SCREEN...
PK-UGEN05-0143A PACKAGE 1 OF 2 LOADING IN PROGRESS. PLEASE WAIT...

```

6. Press enter to continue. LLT initiates connection and load appropriate files to the terminal. LLT connection status and file transfer windows will pop up indicating the progress and state of connection.



7. If load is successful, command windows will indicate SUCCESS with the text turned to green. This completes the first of two loads. LLT will disconnect and the device will reboot to language setting. Reboot the device and put it back into LLT mode. LLT

screen for ISC250 and ISC350 has been updated in SDK8.2 to display full image instead of the “LLT” with the blue background **Make sure this process has been completed before proceeding.** The command windows will stay on waiting for user input. Press enter to complete the rest of the load “Package 2 of 2”. Press any key after the last load has been loaded successfully.

```

#####
PART# : [ PK-UGEN05-0143A ]
INTERNAL CONTACTLESS : NOT CONFIGURED
SECURITY PROFILE: PRODUCTION_ISC350
PACKAGE 1 OF 2
#####
Latest LLT Installation detected in [ C:\Program Files\TELIUM Tools\LLT 4.4.6\ ]
ENTER COM PORT# or [ENTER] for COM1 :6
MAKE SURE DEVICE IS SET TO "LLT" MODE
PRESS ENTER WHEN "LLT" IS DISPLAYED ON DEVICE SCREEN...
PK-UGEN05-0143A PACKAGE 1 OF 2 LOADING IN PROGRESS. PLEASE WAIT...
!!!!!!PACKAGE 1 OF 2 SUCESSFULLY LOADED!!!!!!

-----
      *****
      *      *      *      *      *      *      *      *
      *      *      *      *      *      *      *      *
      *****
      *      *      *      *      *      *      *      *
      *      *      *      *      *      *      *      *
      *****

-----

LOAD PACKAGE 2 OF 2
#####
WAIT FOR DEVICE TO RE-START. MANUALLY PUT DEVICE IN LLT MODE AND PRESS ENTER..
PK-UGEN05-0143A PACKAGE 2 of 2 LOADING IN PROGRESS. PLEASE WAIT...
!!!!!!PACKAGE 2 OF 2 SUCESSFULLY LOADED!!!!!!

-----
      *****
      *      *      *      *      *      *      *      *
      *      *      *      *      *      *      *      *
      *****
      *      *      *      *      *      *      *      *
      *      *      *      *      *      *      *      *
      *****

-----
Loading is completed
Press any key to continue . . . _

```

8. A logged file “downloadlog.txt” in the package directory will be generated for every download attempt. Below is a sample of some successful download logs.


```

-----
USWNPR22763 - aharon - 02/23/2011 - 13:12:13.96
PK-RGEN02-01.20 C:\Project\TELIUM_PHASE2_RELEASES\PK\PK-RGEN02-01.20
Succesfull Download
-----
USWNPR22763 - aharon - 02/23/2011 - 13:13:50.61
PK-RGEN02-01.20 C:\Project\TELIUM_PHASE2_RELEASES\PK\PK-RGEN02-01.20
Succesfull Download
-----
USWNPR22763 - aharon - 02/23/2011 - 23:23:14.11
PK-RGEN02-01.20 WITH KIA C:\Project\TELIUM_PHASE2_RELEASES\PK\PK-RGEN02-01.20
Succesfull Download
-----
USWNPR22763 - aharon - 02/23/2011 - 23:32:49.33
PK-RGEN02-01.20 C:\Project\TELIUM_PHASE2_RELEASES\PK\PK-RGEN02-01.20
Download Failed -8
-----

```

11. The unit is now ready to be key injected (optional). If key injection is not required user may select that option which will delete the KIA.
12. Once this is done, the unit should come up to the application splash screen.

Note: The downloadlog.txt will show the following information:

- HOST PC Windows name.
- Domain user name.
- Load date and time stamp.
- Package Part Number.
- Package Location.
- Download status.

13. To verify key following the injection;
Reboot unit → at app splash screen press in sequence '2' '6' '3' '4' 'Enter' 'F1'. This action will take user to the Telium Manager screen. Select TSA and verify the appropriate keys.

6.2. USB Load

!! IMPORTANT !!

MOCKUP [0035-001] downloadable package MUST ONLY be used on a mockup profile unit.

PRODUCTION [0248-014] downloadable package MUST ONLY be used on a production profile unit.

Failing to do so will render device in an unrecoverable state that will require sending the unit back to Ingenico to be factory reset.

The simplest way to update the device package is via USB Memory stick. However this mode is only supported on the ISC350 device. Make sure the USB memory is formatted to FAT16. Package download is necessary only for the purpose of updating the existing unit with the included UIA package. Below is an example of preparing and loading the USB package into the device.

1. Copy the directory “TELIUM” from **IK-OPOS-04.00\Telium UIA Terminal Applications\Production Profile USB Package\ISC350** to the root directory of your flash drive.
2. Reboot the device by pressing and holding down the ‘-’ and ‘Clear’ key on ISC350.
3. Release when device beep and reboots. While rebooting hold down the 1 key (Terminal will come up to “LLT” mode).
4. When the first asterisk is displayed, quickly press ‘3’, ‘4’, ‘6’ sequentially.
5. Device should now be in LLT mode with “LLT” displayed on screen.
6. Insert the USB flash drive to the side USB port on the ISC350 (ISC250 requires a special cable that has a USB port)
7. Reboot the ISC350
8. While device is booting up press ‘4’ key until ‘USB MASS STORAGE’ is displayed on the screen. The screen will show MOCKUP and PRODUCTION selections depending on the package selected. Select the load by using the ‘2’ and ‘8’ keys to scroll.

```
>!!PK-UGEN05-0150A_NO_CLESS!!  
1ST-LOAD  
2ND-LOAD
```
9. Select **1ST-LOAD** and press enter to initiate loading. On completion software components will be activated. OK is displayed on successful activation. Reboot the device.
10. Repeat step 8 and select **2ND-LOAD**.
11. USB loading completed. UIA splash screen comes up as the default application if activation succeeded.

6.3. OGZ Load

!! IMPORTANT !!

MOCKUP [0035-001] downloadable package MUST ONLY be used on a mockup profile unit.

PRODUCTION [0248-014] downloadable package MUST ONLY be used on a production profile unit.

Failing to do so will render device in an unrecoverable state that will require sending the unit back to Ingenico to be factory reset.

OGZ package in the kit is intended only for production profiled IPP3XX ISCx50 terminals. OGZ file is an Ingenico compress SW package downloadable via direct IO at runtime. Please note that this mode will take longer depending on the connection type being used. The package purpose is to update the existing unit with the newer UIA package. Below are the steps to load OGZ package via the OPOS Test App;

1. Bring terminal to UIA Splash screen
2. Run the OPOS test app
3. Go to the LineDisplay or any other control.
4. Do open, claim, and enable
5. Click on the DIRECT IO button
6. Select SAVE_FILE from command drop down box.
7. Browse TGZ, PGZ, or OGZ filename and its path in the box.
8. Enter 1 in the Data box to auto activate at the end of the download.
9. Click on the DirectIO button to execute the particular command.

6.4. Updating Communication file via file download

By default the unit is set to RS-232, 115200, N, 8, 1. User can change the device comm. setting manually (Refer to the developers guide for instruction) or they can use the packaged sample communication files included in the kit. The files are in **IK-OPOS-04.00\UIA Data Samples and Configuration Files\COMM Files**. Ethernet (DHCP), RS232, USBHID and USBCDC communication files are provided in the TGZ format downloadable format as well as XML format. Steps to load TGZ package via the OPOS Test App;

1. Bring terminal to UIA Splash screen

2. Run OPOS Test App.
3. Open, Claim, Enable, Direct I/O from any option from any control.
4. Click on Direct I/O button.
5. Select 'Save File' from the DirectIO drop box. Click on Browse object and locate the COM .TGZ file to load. For instance, **ISC350 USB_CDC** in **IK-OPOS-04.00\UIA Data Samples and Configuration Files\COMM Files\USB-CDC**
6. Enter '1' in Data field to activate automatically after download or enter '0' / blank for manual activation.
7. Click Direct I/O to initiate the download.

6.5. Enabling Contactless on Supported Device

If your device hardware supports Contactless but not enable, do the following to enable them:

1. Go to **IK-OPOS-04.00\UIA Data Samples and Configuration Files\CLESS**. Load the **MANAGER.PAR** file via LLT using the **LOAD_CLESS.BAT**.
2. The top left LED on IPP3XX, and ISC250 (LED icon on ISC350) should blink at interval if contactless is detected and enabled.