Getting Started

With

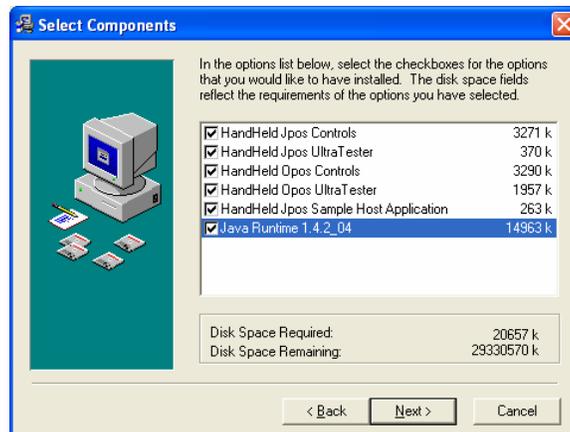# UnifiedPOS for Hand Held Products

Introduction

This document describes how to install, configure and use the Hand Held Products OPOS/JPOS controls implementation including the OPOS/JPOS UltraTesters.
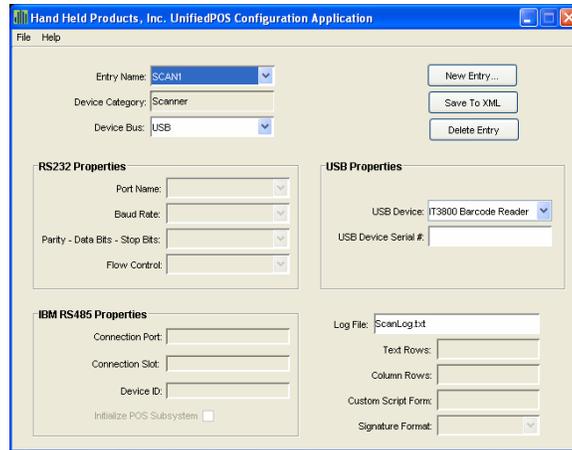
Installation & Configuration

1. Download and run the installer "**HandHeldUPOSInstall.exe**".

   a. Follow the defaults and check the Java Runtime install option if the Java Runtime is not already installed on the host system.

2. Configure your Windows system environmental PATH variable to include:
   a. "**<install_dir>\bin**" (i.e., C:\HandHeldProducts\Upos\bin)
   b. "**<jre_dir>\bin**" (i.e., C:\Program Files\Java\j2re1.4.2_04\bin)
   c. "**<jre_dir>\bin\client**" (i.e., C:\Program Files\Java\j2re1.4.2_04\bin\client)
3. Run the UPOS Configuration Tool located in "**<install_dir>\RunUposConfig.bat**".

    a. Choose the Correct Device Bus.
    b. Update the Device Bus specific properties.
    c. [Optional] Define a Log File [written to the **<install_dir>**].
    d. [Optional, TT8xxx Series Transaction Terminal] Identify a Custom Script Form: (Requires a script loaded onto the device):

Entry Name	Device Category	HandHeld Physical device	Custom Script Form	Signature Format
L1	Line Display	TT8xxx Series Transaction Terminal	PadLineDisplay	N/A
SCAN1	Scanner	2020, 3800, 4010, 4080, 4200, 4600g ([1]IT4600), 4620, 4800i ([1]IT4800), 3800r ([1]IT5600), 3800i ([1]IT5800)	N/A	N/A
K1	POSKeyboard	TT8xxx Series Transaction Terminal	PadInstantCredit_SSN	N/A
P1	PadPin	TT8xxx Series Transaction Terminal	PadPin	N/A
M1	MSR	TT8xxx Series Transaction Terminal	N/A	N/A
S1	Signature Capture	TT8xxx Series Transaction Terminal	N/A	N/A
T1	Tone Indicator	TT8xxx Series Transaction Terminal	N/A	N/A

[1] = *Former model number*

4. Connect and configure your Hand Held Products device.
    a. Follow the instructions in the product's User's Guide to configure the device according to the settings you specified in step 3.
5. Run the OPOS or JPOS UltraTester located in "**<install_dir>\OposUltraTester.exe**" or "**RunJposUltraTester.bat**".

Usage

Details regarding UnifiedPOS control properties, methods, and events can be found in the UnifiedPOS Retail Peripheral Architecture Version 1.9 International Standard for Implementation of Point of Service Peripherals. This manual is located at: http://www.javapos.com/public.app.guide.9.html.

OPOS UltraTester

The OPOS UltraTester is used to exercise all of the connected Hand Held Products devices using the OLE for Retail control and service object architecture.
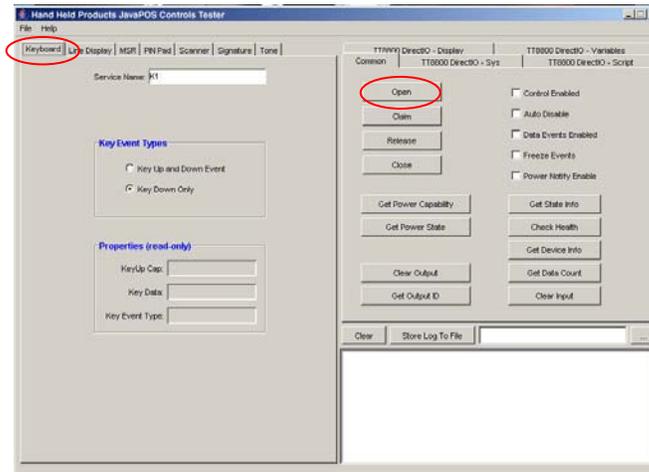
OLE for Retail POS provides an open device architecture that allows POS hardware to be easily integrated into POS Systems based on the Microsoft® Windows® family of operating systems. It is an implementation of the UnifiedPOS standard based upon the OLE 2.x architecture

JavaPOS UltraTester

The JavaPOS UltraTester is used to exercise all of the connected Hand Held Products devices using the JPOS controls.

UltraTester allows you to perform the main functions provided by JavaPOS. Using UltraTester, you can open the COM port, claim the device, enable data events, and then receive device data. It can also change supported JavaPOS control properties and verify the new values. UltraTester also provides an interface for using and testing the various DirectIO functions available on the Hand Held Products JavaPOS controls that interface to the Transaction Terminals.

The GUI items on the tabs on the right side of the application apply to the control shown on the currently displayed tab on the left side of the main window. For example, to open the keyboard control, you must first display the keyboard control tab on the left side of the application. Then click the **Open** button on the tab on the right side window. This operation opens only the keyboard control. By selecting different left side tabs, multiple controls can be opened and tested simultaneously.

Sample Host Application

The Hand Held Products JavaPOS Host Sample application is an optional component that simulates a point-of-sale register interfacing to a Transaction Terminal along with a Hand Held Products scanner. JavaPOS Host Sample exercises all the JavaPOS controls for the Transaction Terminal (MSR, Sig, PinPad, LineDisplay, Keyboard, Toner) and also exercises the scanner control. The Transaction Terminal contains a script that has the typical point-of-sale functionality (line item display, credit, debit, signature, instant credit application, survey, etc.). There is a separate script for RS-232/RS-485 connectivity and USB connectivity. Before running JavaPOS Host Sample, the Transaction Terminal script must be downloaded to the Transaction Terminal. This can be done via a directIO function using the Hand Held Products JavaPOS UltraTester, or can be done via a Hand Held Products supplied TT8000 Series Loader utility. The script files are in the following directories:
C:\<install_dir>\bin\UPOS_Sample_Script_USB.bin
C:\<install_dir>\bin\UPOS_Sample_Script_RS232_RS_485.bin

Troubleshooting

1) The Configuration or UltraTester Tools will not launch.

    a) Verify that the Java runtime paths are correctly added to the Windows Environment PATH

2) Unable to run applications with HandHeld OPOS/JPOS controls (Log Error: "Service does not exist in loaded JCL registry")

    a) You must update the jpos.config.populatorFile attribute located within the jcl.jar file's jpos.properties file. The following is an example of the new jpos.properties entry:

```
#-----------------------------------------------------------------------
# Use this property for the JCL to load a specific file (cfg or XML)
# when not using multiple populators via the jpos.config.populator.class.
# multi-property
#-----------------------------------------------------------------------
jpos.config.populatorFile=C://HandHeldProducts/UPOS/res/jpos.xml
```

    b) You should also verify that your third party application's classpath includes the path to the device specific jar, hhpjpos.jar, as well as any dependent files such as comm.jar. The updated classpath will be similar to the following:
```
set classpath=%classpath%;c:\HandHeldProducts\UPOS\bin\comm.jar;c:\<install.dir>
```