

MagTek

JavaPOS FOR MSR DEVICES

PROGRAMMING REFERENCE MANUAL

Part Number: 99875580 Rev 1

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MAGTEK[®]

REGISTERED TO ISO 9001:2008

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REVISIONS

Rev Number	Date	Notes
1	5 Apr 12	Initial Release



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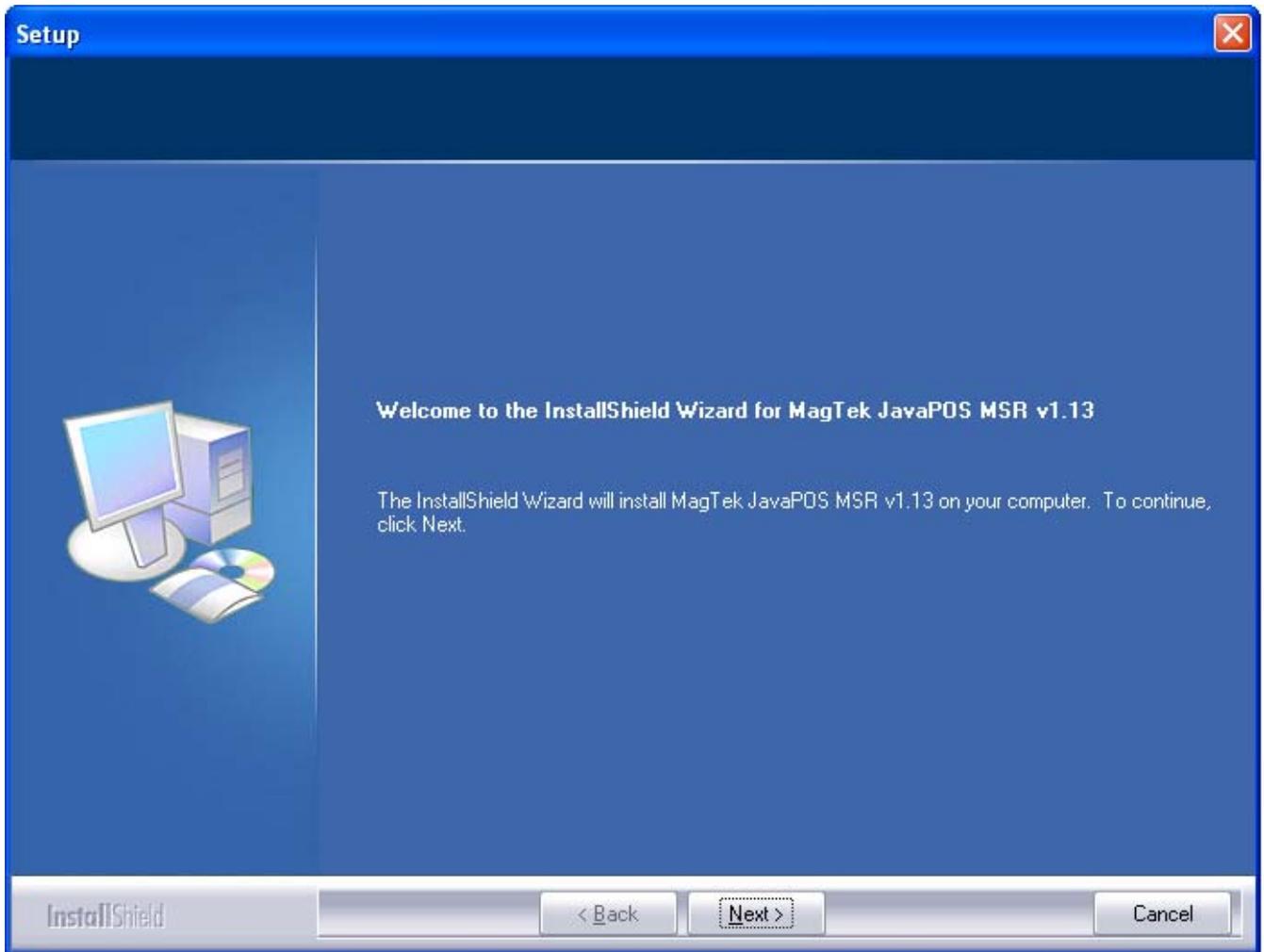
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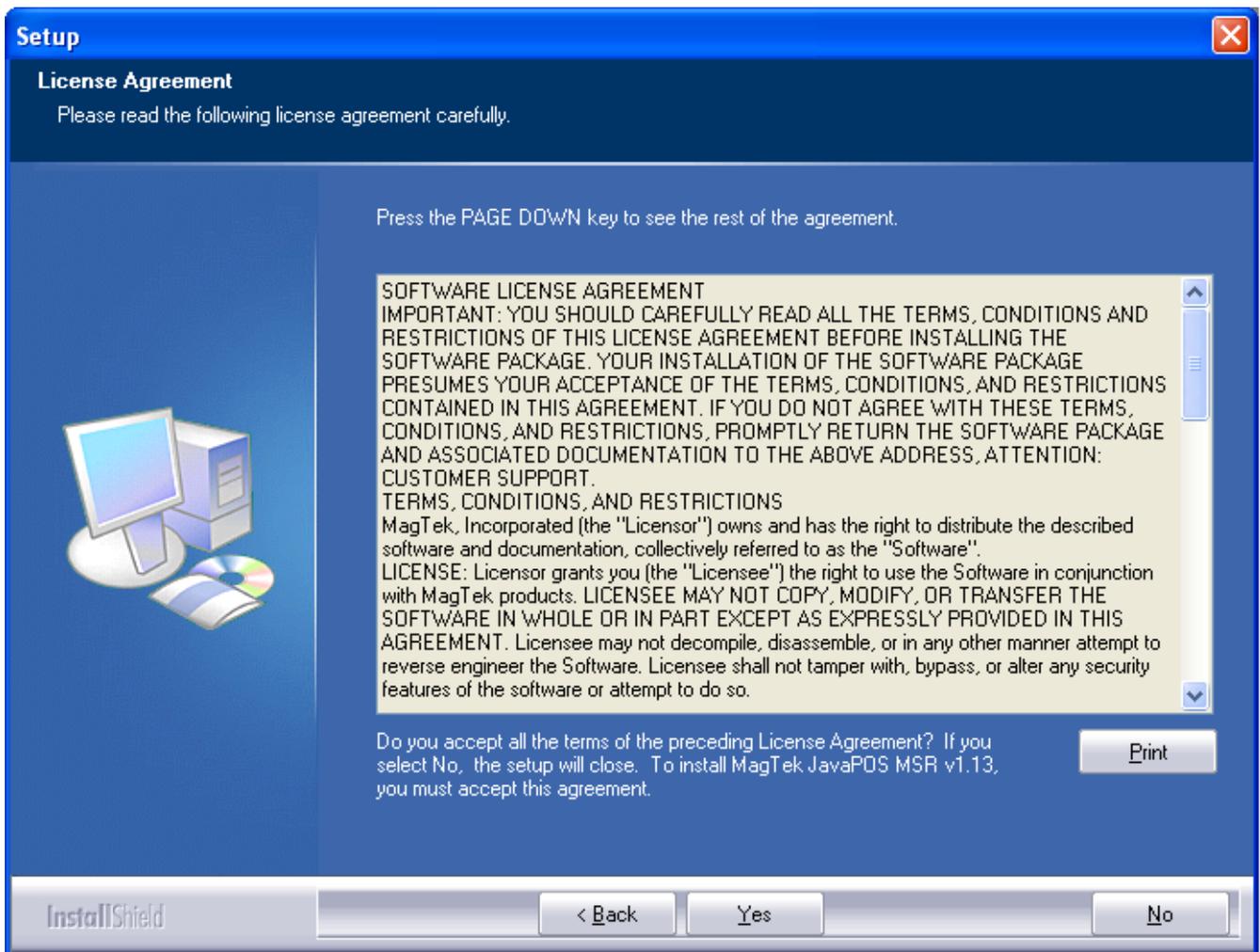
SECTION 1. INSTALLATION

The MagTek UPOS 1.13 JavaPOS MSR is installed via an InstallShield application. Within the Disk1 folder, double click on the 'setup.exe' file to launch the installation.

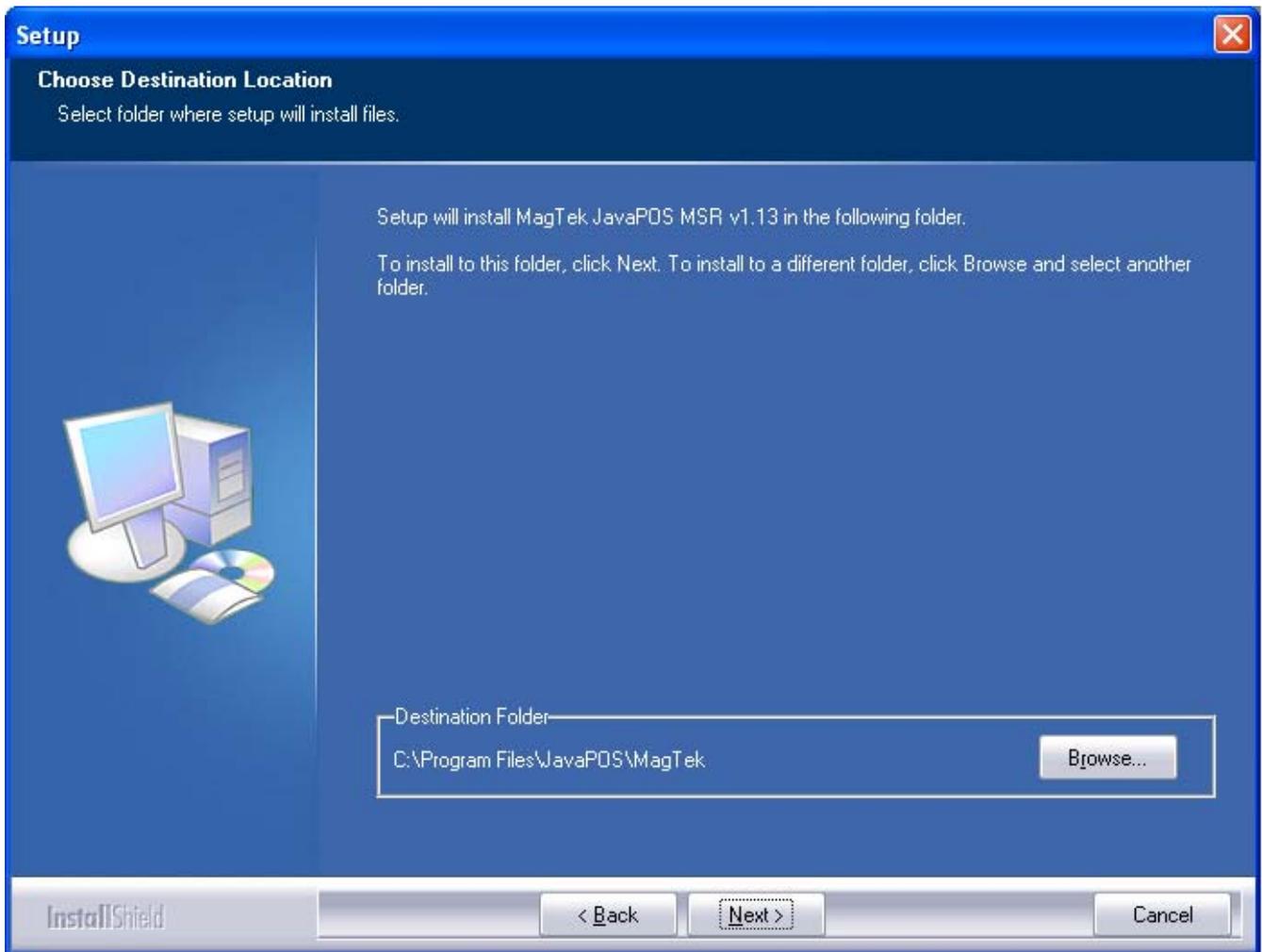
The following screen shots will be a guide through the installation:



The Initial welcome screen for the installation of the MagTek JavaPOS MSR.



The license agreement display for acceptance or cancellation for the installation of the MagTek JavaPOS MSR.



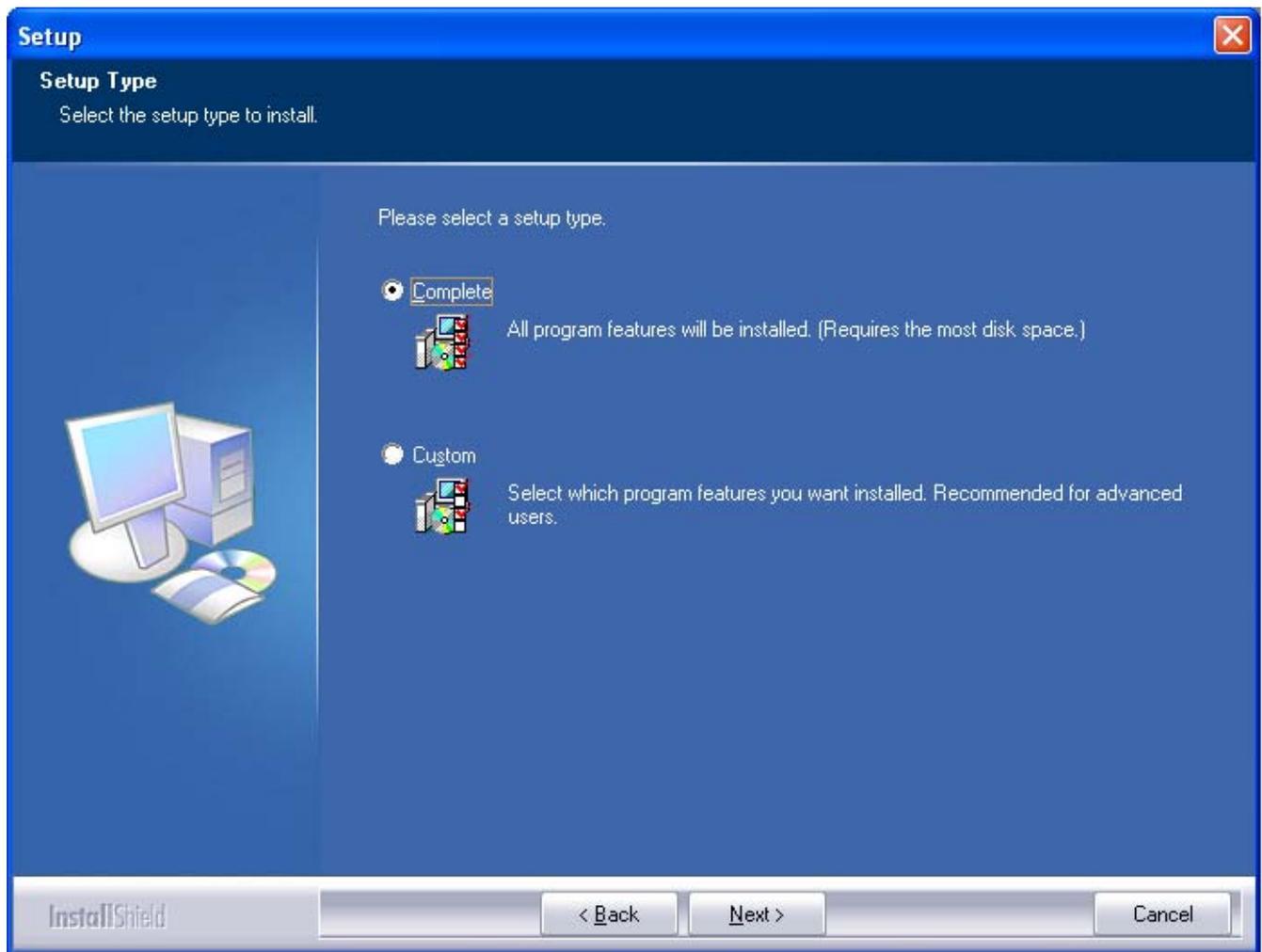
The target folder location for the installation of the MagTek JavaPOS MSR.

The default target folder :

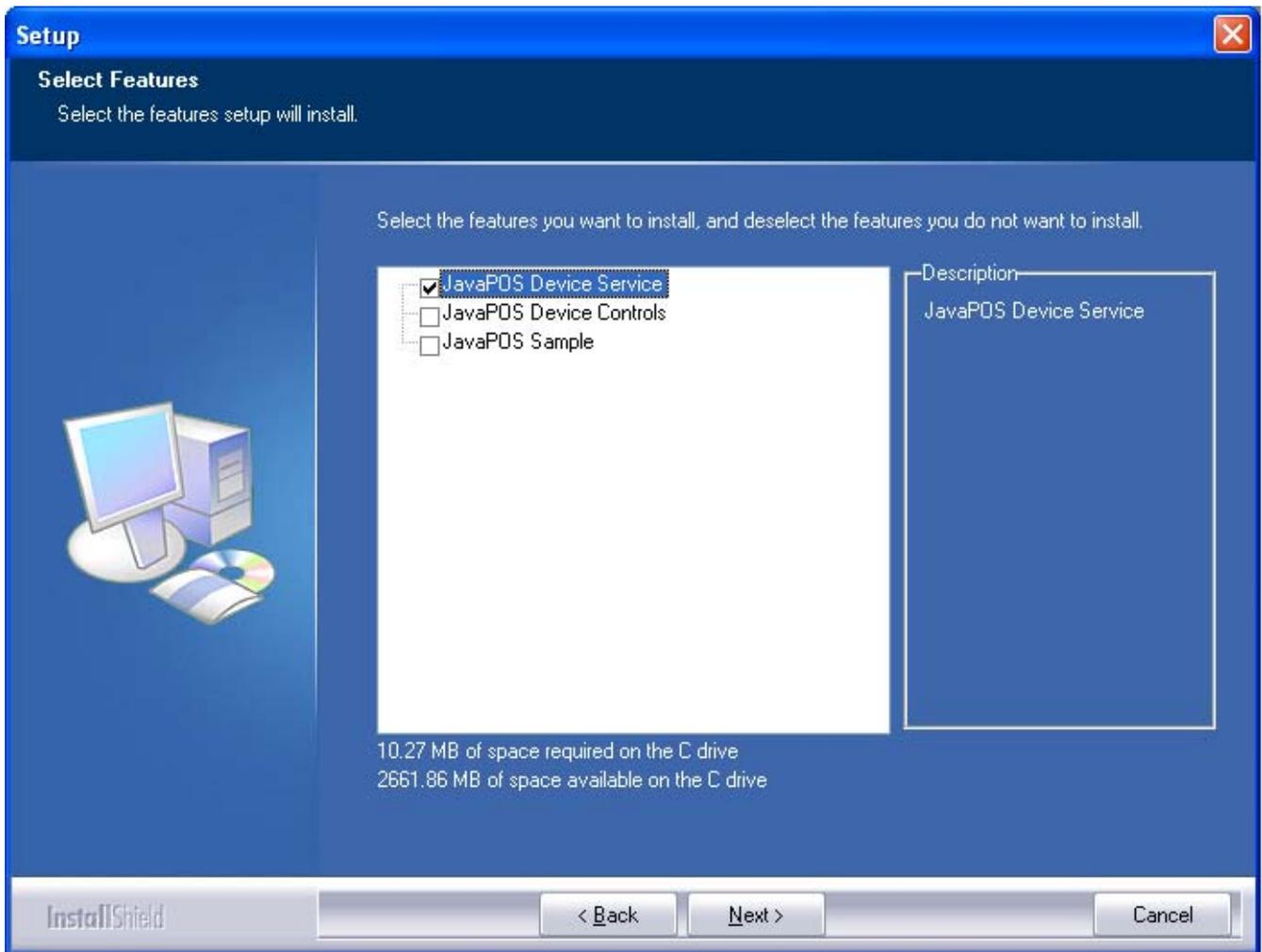
For x86 platforms: C:\Program Files\JavaPOS\MagTek

For x64 platforms: C:\Program Files (x86)\JavaPOS\MagTek

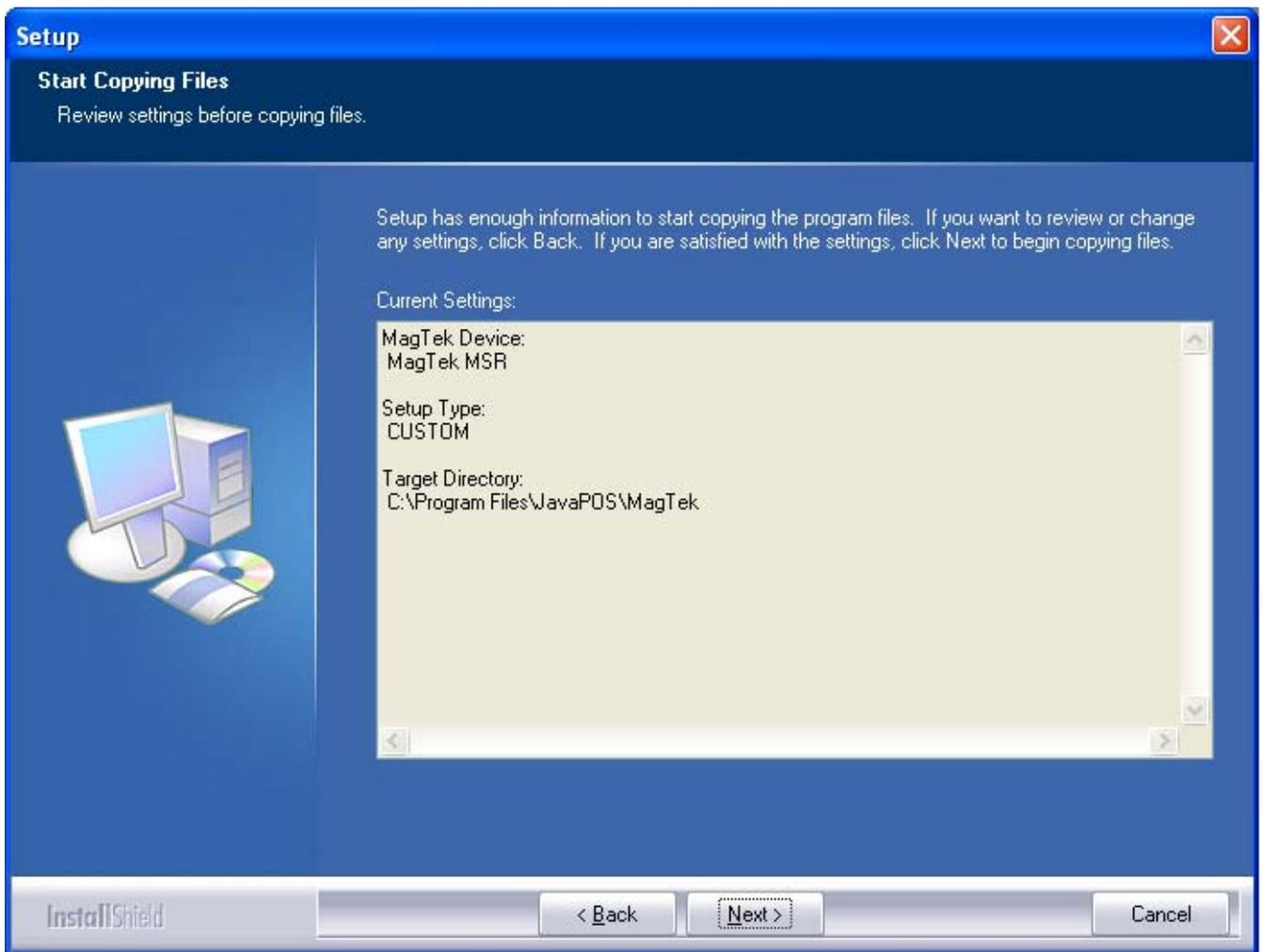
Click on the 'Browse' button to change the installation folder.



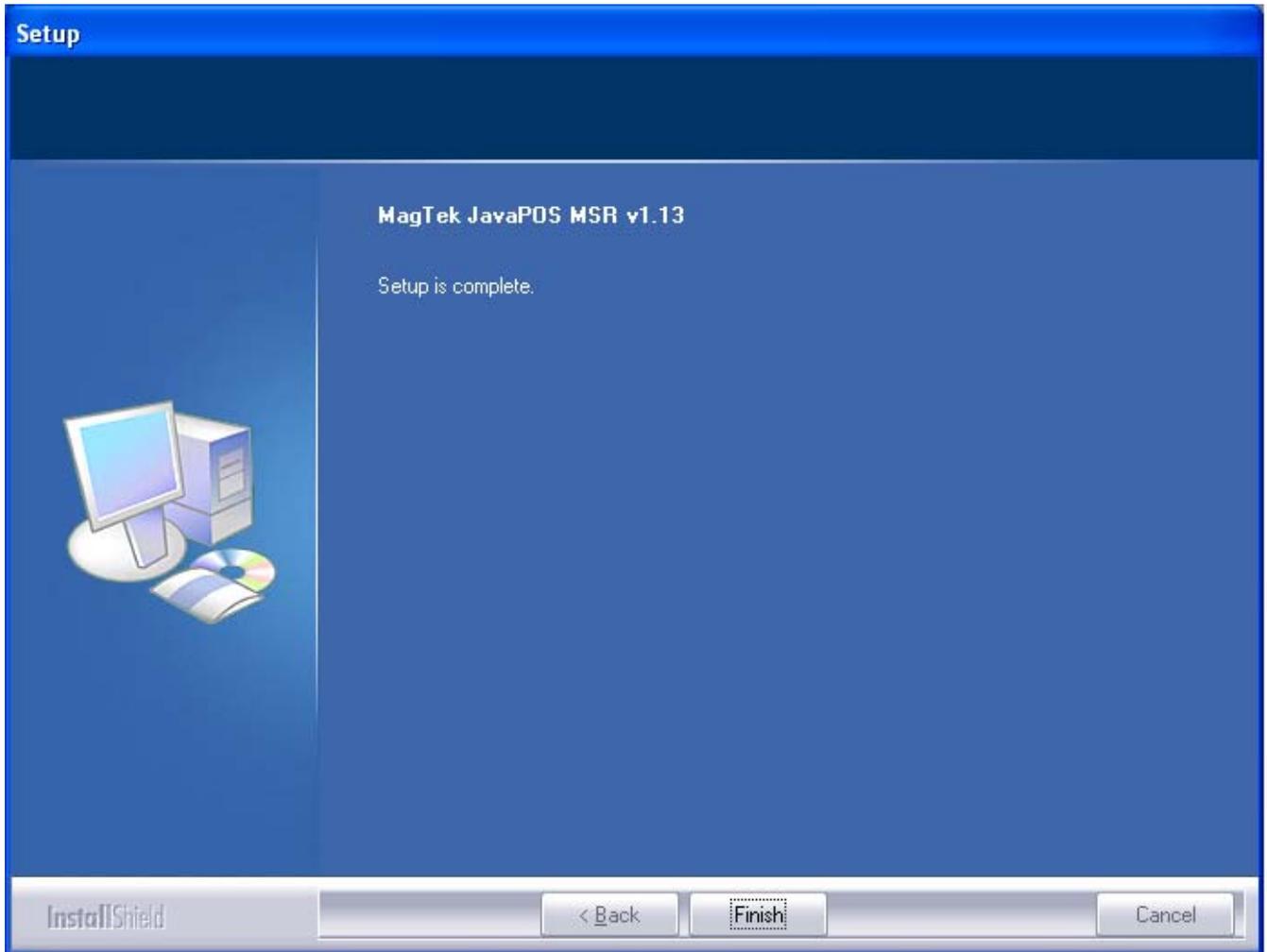
The setup type for the installation of the MagTek JavaPOS MSR is 'Complete' or 'Custom'. The 'Complete' setup type will proceed to install all components for the MagTek JavaPOS MSR.



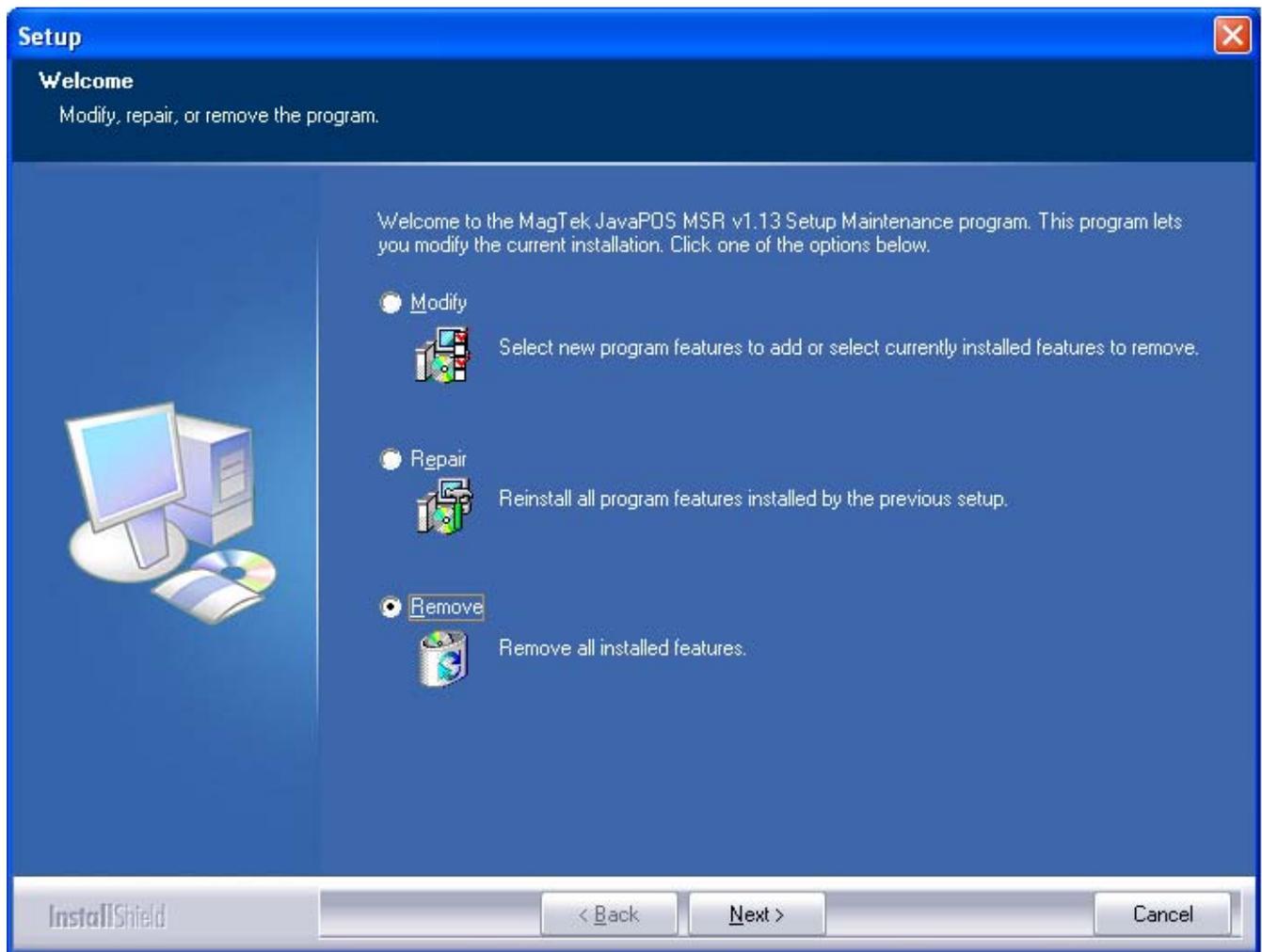
The 'Custom' setup type will enable the options for the Common Control Objects and the JavaPOS Sample components to be installed for the MagTek JavaPOS MSR.



The current settings displayed prior to installation of the MagTek JavaPOS MSR.



The setup complete will be displayed for a successful installation of the MagTek JavaPOS MSR.



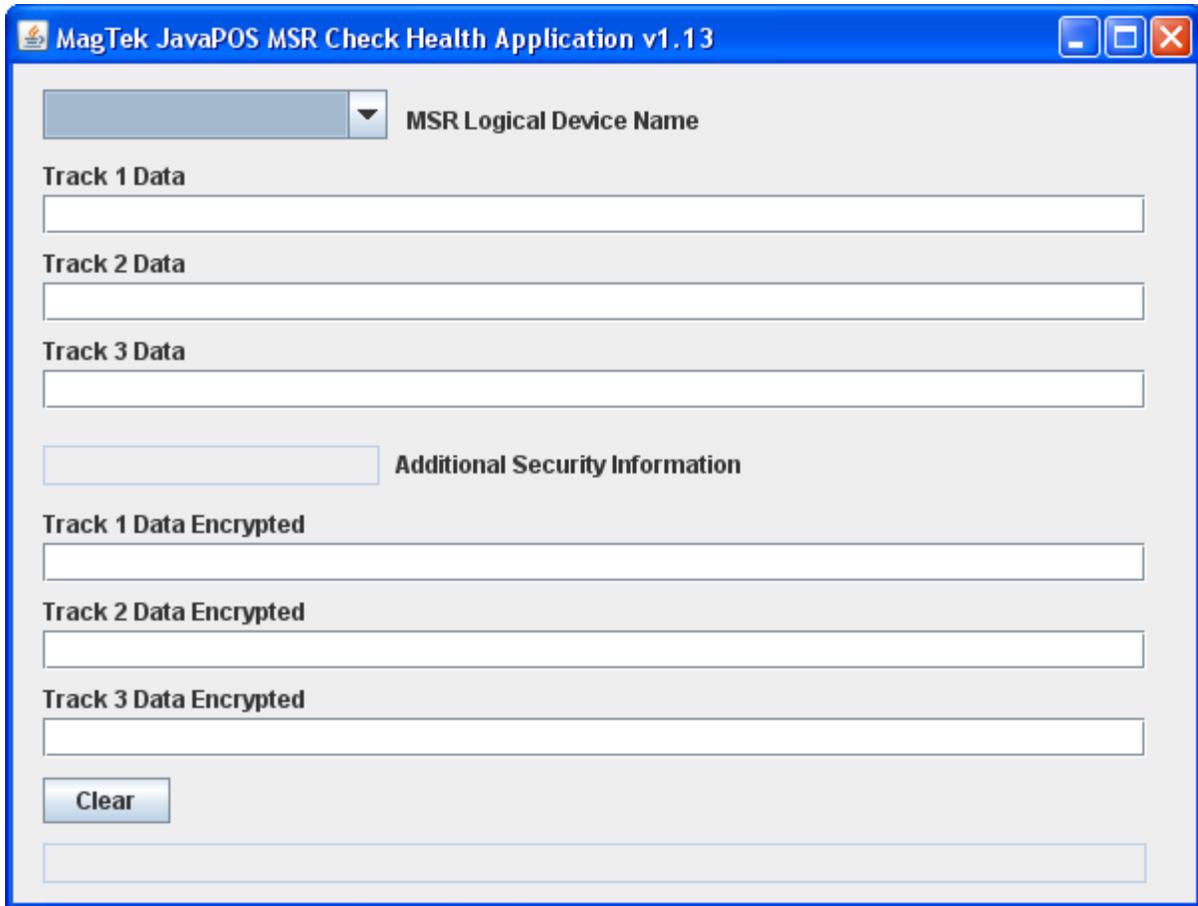
Maintenance for the MagTek JavaPOS MSR installation will include the options to Modify, Repair or Remove (default).

* InstallShield is a registered trademark of the Flexera Software Company.

SECTION 2. UTILITY

The MagTek UPOS 1.13 JavaPOS MSR Utility application performs JavaPOS Check Health testing of the MagTek MSR JavaPOS device based on the pre-registered Logical Device Names (LDN) via the jpos.xml file.

Within the MagTek JavaPOS MSR target installation 'service' sub-folder, double click on the 'MSRUtility.bat' file to launch the MagTek JavaPOS MSR Utility Check Health application.



The screenshot shows a Windows application window titled "MagTek JavaPOS MSR Check Health Application v1.13". The interface includes a dropdown menu for "MSR Logical Device Name" at the top. Below this are three input fields labeled "Track 1 Data", "Track 2 Data", and "Track 3 Data". A section labeled "Additional Security Information" contains a single input field. Further down are three more input fields labeled "Track 1 Data Encrypted", "Track 2 Data Encrypted", and "Track 3 Data Encrypted". A "Clear" button is located at the bottom left, and a long, empty input field is at the bottom right.

The MagTek JavaPOS MSR Utility Check Health application screen. The MSR Logical Device Name (LDN) within the combo box is to first be selected for the USB connected MagTek MSR device and tested by populating the fields below of the most recent swiped card data. The Clear button will clear all display data fields.

The pre-registered MagTek MSR Logical Device Names via the jpos.xml registration file are:
MagTekMSR (MagTek non-encrypted MSR reader)
MagTekMSR_Encrypted (MagTek encrypted MSR reader).

The screenshot shows a software window titled "MagTek JavaPOS MSR Check Health Application v1.13". At the top left is a small icon and the title text. At the top right are standard window control buttons (minimize, maximize, close). The main area contains a dropdown menu labeled "MSR Logical Device Name" with a downward arrow. The dropdown is open, showing two options: "MagTekMSR" and "MagTekMSR_Encrypted". Below the dropdown are several text input fields: "Track 2 Data", "Track 3 Data", "Additional Security Information" (with a small text box to its left), "Track 1 Data Encrypted", "Track 2 Data Encrypted", and "Track 3 Data Encrypted". At the bottom left is a "Clear" button. At the bottom center is a long, empty text input field.

The MagTek MSR Logical Device Names are displayed within the combo box: 1) 'MagTekMSR' (representing the non-encrypted based reader) and 2) 'MagTekMSR_Encrypted' (representing the encrypted based reader) to be tested via the populated fields: Track 1 Data, Track 2 Data and Track 3 Data for both the MagTek Non-encrypted and encrypted MSR reader; and the Additional Security Information, Track 1 Data Encrypted, Track 2 Data Encrypted and Track 3 Data Encrypted for the MagTek encrypted MSR reader.

MagTekMSR MSR Logical Device Name

Track 1 Data
B4322507007623214^SMITH/JOHN ^1004101000011103023419751000000

Track 2 Data
4322507007623214=100410111041975102031

Track 3 Data

Additional Security Information

Track 1 Data Encrypted

Track 2 Data Encrypted

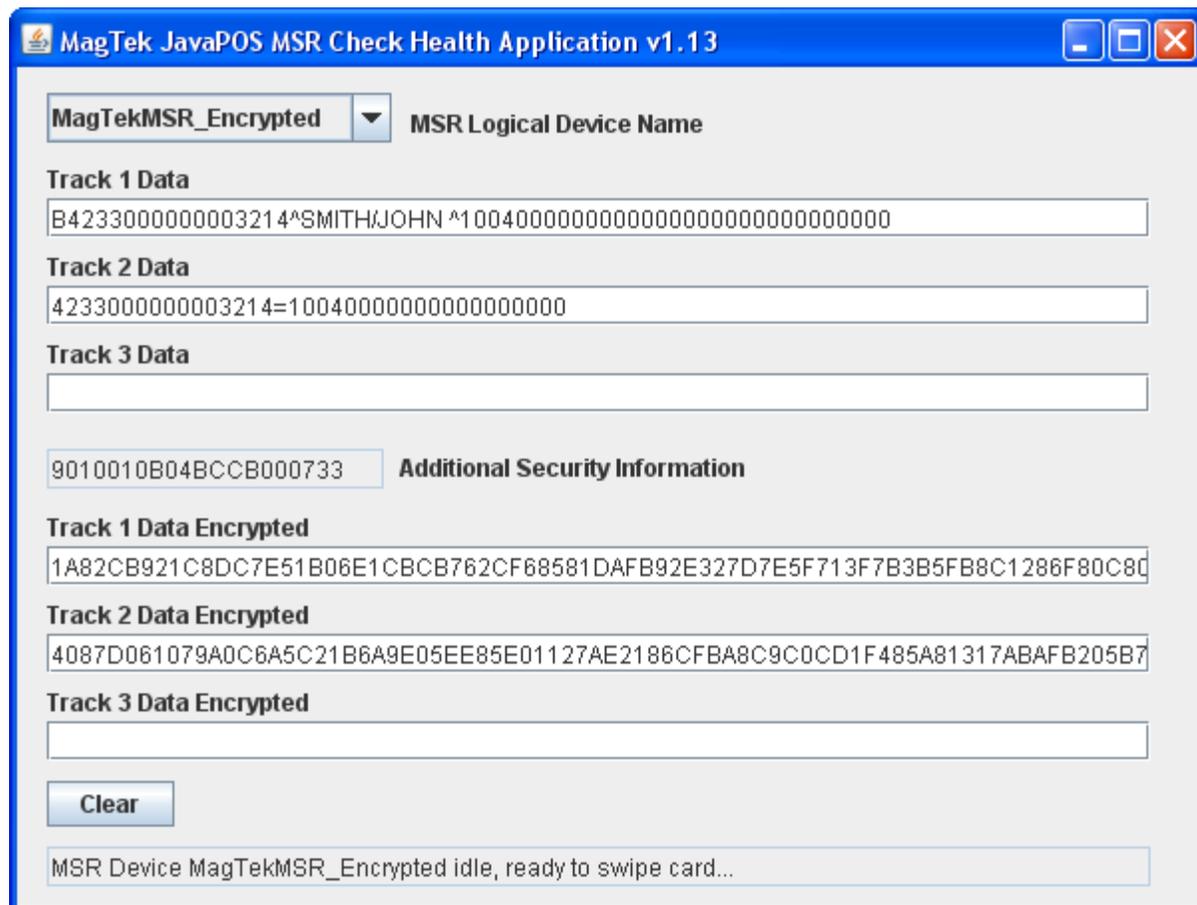
Track 3 Data Encrypted

Clear

MSR Device MagTekMSR idle, ready to swipe card...

Example of using the 'MagTekMSR' Logical Device Name with the USB connected MagTek non-encrypted based reader.

The appropriate non-encrypted data fields are populated with clear text information.



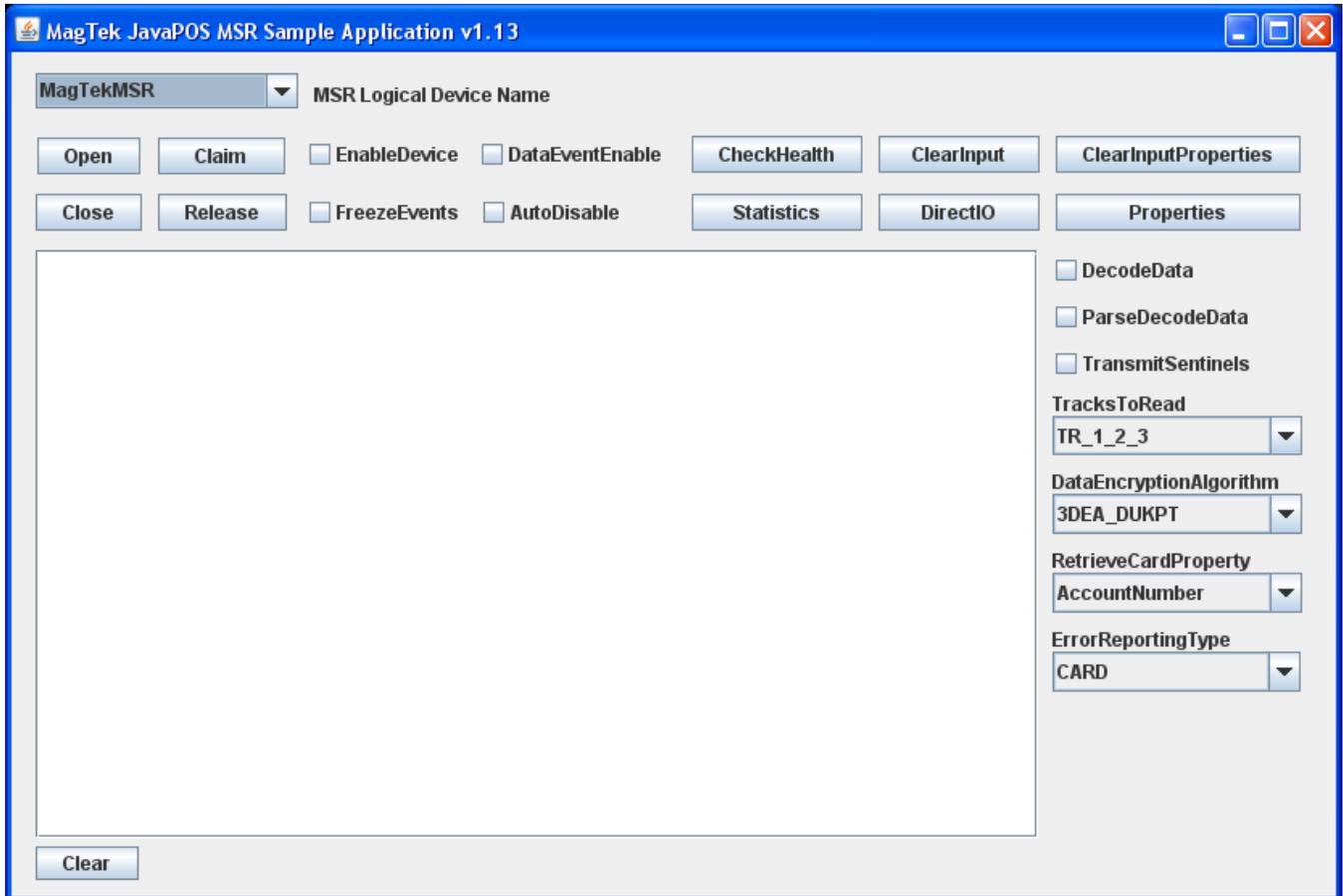
Example of using the 'MagTekMSR_Encrypted' Logical Device Name with the USB connected MagTek encrypted based reader.

The appropriate encrypted data fields are populated with masked text data and encrypted data along with the Additional Security Information for encrypted data decoding.

SECTION 3. SAMPLE

The MagTek UPOS 1.13 JavaPOS MSR Sample application demonstrates the UPOS 1.13 JavaPOS MSR Properties, Methods and Events for the MagTek JavaPOS 1.13 MSR non-encrypted and encrypted readers.

Within the MagTek JavaPOS MSR target installation ‘service’ sub-folder, double click on the ‘Sample’ folder and then double click on the ‘MSRSample.bat’ file to launch the MagTek JavaPOS MSR Sample application.



The MagTek JavaPOS MSR Sample application screen. The MSR Logical Device Name (LDN) within the combo box is to first be selected for the USB connected MagTek MSR device for JavaPOS Properties, Methods and Events operations.

MSR Logical Device Name

[Combo box]

This combo box contains the JavaPOS registered Logical Device Names (LDN) to be selected for MagTek JavaPOS MSR device instantiation via the jpos.xml file located within target installation ‘service’ sub-folder.

JavaPOS Open method

[Button]

This button will pass the selected LDN as the string parameter of the JavaPOS Open method, which will instantiate the associated JavaPOS device object for processing of all JavaPOS MSR Properties, Methods and Events.

JavaPOS Claim method

[Button]

This button will claim the MagTek JavaPOS MSR device object for exclusive use. (Required for the JavaPOS MSR device object).

JavaPOS DeviceEnabled property

[Check box]

This check box enables (checked) or disables (unchecked) the MSR device object. (Required for most JavaPOS operations).

JavaPOS DataEventEnabled property

[Check box]

This check box enables (checked) or disables (unchecked) Data Events to be sent from the MagTek JavaPOS MSR Service Object for any queued MSR read data. Per the UPOS 1.13 JavaPOS Standards specification, this DataEventEnabled property is set to false within the MagTek JavaPOS MSR Service Object after each JavaPOS MSR Data Event is fired to the JavaPOS application. The JavaPOS application is required to re-enable the DataEventEnabled property to receive the MSR read data from the most recent or queued card swipe.

JavaPOS CheckHealth method

[Button]

This button will invoke the CheckHealth (Internal) method and display the CheckHealthText Property value within the output window.

JavaPOS ClearInput method

[Button]

This button will clear any queued MSR read data within the MagTek JavaPOS MSR Service Object.

JavaPOS ClearInputProperties method

[Button]

This button will clear all properties populated via the most recent MSR read data.

Properties

[Button]

This button will invoke and display all the JavaPOS common and device specific MSR properties within the output window. All properties associated to MSR read data will contain data from the most recently swiped card.

JavaPOS DecodeData property

[Check box]

This check box enables (checked) or disables (unchecked) the MSR specific DecodeData property.

JavaPOS ParseDecodeData property

[Check box]

This check box enables (checked) or disables (unchecked) the MSR specific ParseDecodeData property.

JavaPOS TransmitSentinels property

[Check box]

This check box enables (checked) or disables (unchecked) the MSR specific TransmitSentinels property.

TracksToRead

[Combo box]

This combo box contains the JavaPOS MSR options for the Tracks To Read setting and reflected within the populated JavaPOS MSR Properties.

DataEncryptionAlgorithm

[Combo box]

This combo box contains the MagTek JavaPOS MSR supported Data Encryption Algorithms. Note: This Property setting only applies to the MagTek encrypted based MSR devices.

RetrieveCardProperty

[Combo box]

This combo box contains the MSR specific Properties to be retrieved corresponding to the parsing of the recently swiped card.

Properties that do not contain data did not exist in the original track number data.

ErrorReportingType

[Combo box]

This combo box contains the MSR specific Property for reporting the error type, either Card or Track based error reporting.

JavaPOS DirectIO method

[Button]

This button invokes the DirectIO Method example.

JavaPOS Statistics method

[Button]

This button invokes the supported RetrieveStatistics Method returning the JavaPOS Statistics XML based string and is displayed within a launched dialog box.

JavaPOS AutoDisable property

[Check box]

This check box enables (checked) or disables (unchecked) the Auto Disable Property. This Property is used for added control with receiving event driven input from the MSR device object.

JavaPOS FreezeEvents property

[Check box]

This check box enables (checked) or disables (unchecked) the Freeze Events Property. This Property is used to control when events are to be received. This applies to all Events associated with the JavaPOS MSR device object.

JavaPOS Release (ReleaseDevice) method

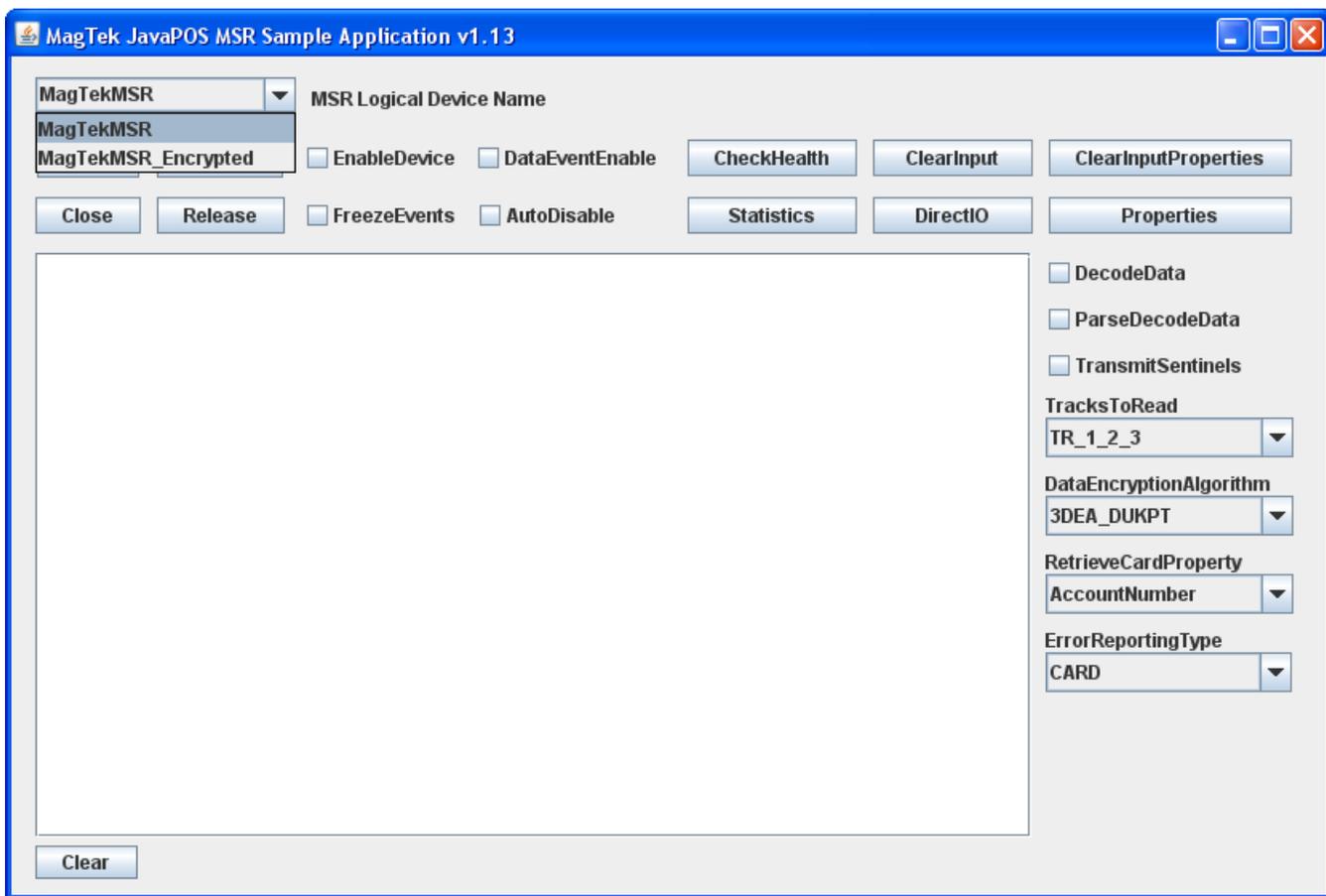
[Button]

This button will release the MagTek JavaPOS MSR device object from exclusive use.

JavaPOS Close method

[Button]

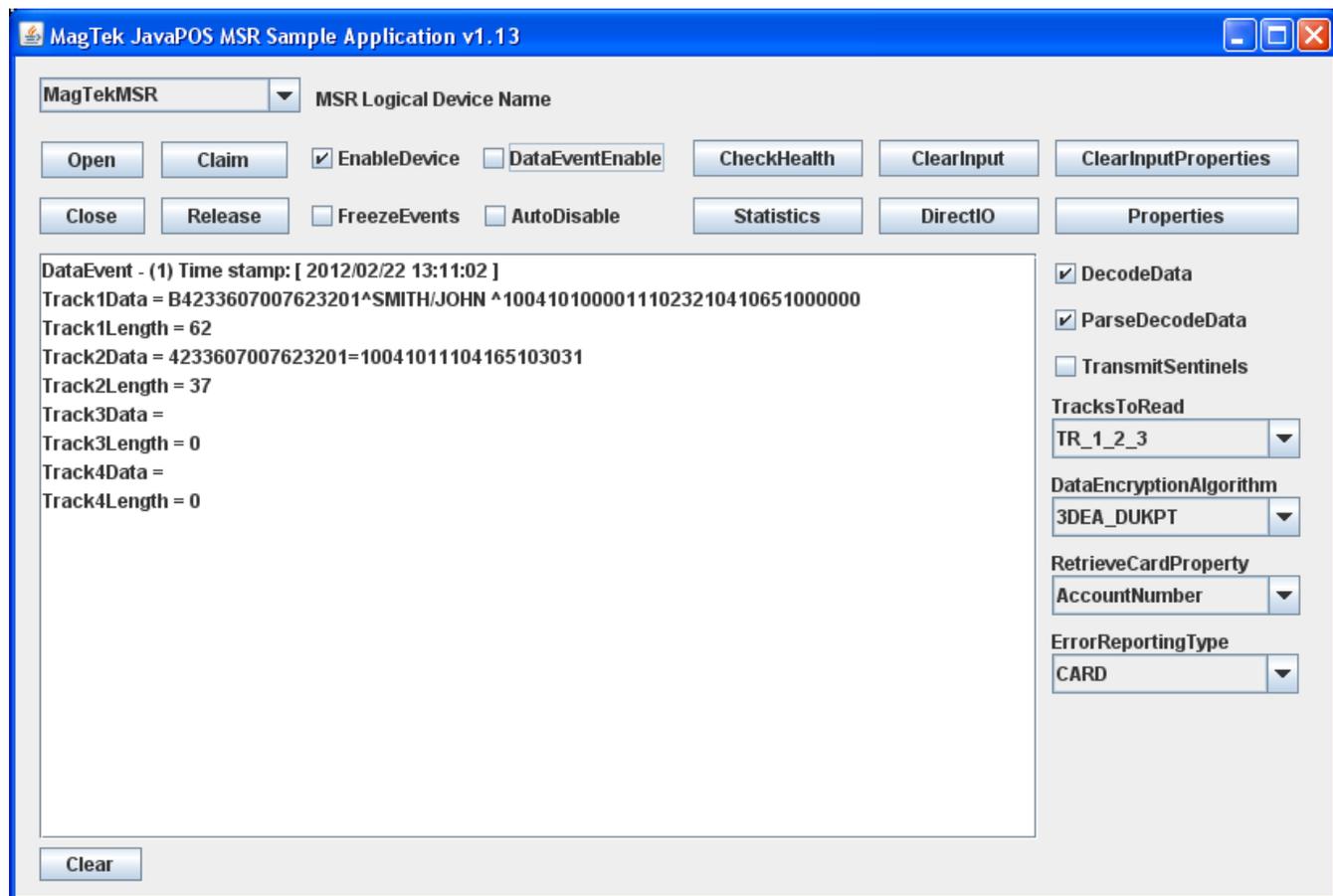
This button will close the MagTek JavaPOS MSR device object instantiation.



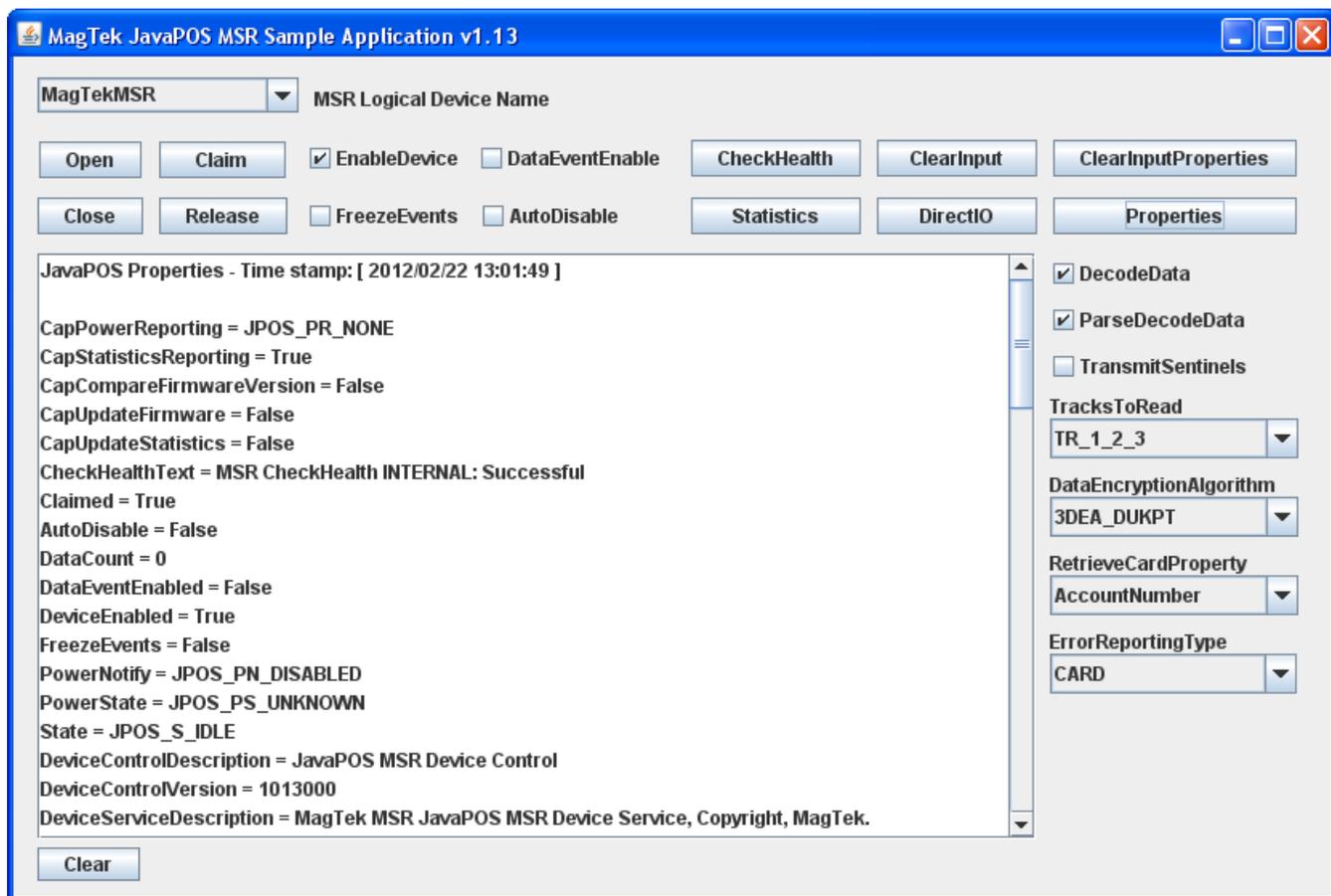
Example of the Logical Device Name combo box containing the default JavaPOS MSR registered Logical Device Names (LDN) via the jpos.xml registration file.

Additional Logical Device Names may be added or removed via the jposEntryEditor or manual editing of the jpos.xml file.

JavaPOS for MSR Devices



Example of a received and displayed JavaPOS MSR Data Event of a swiped card.
The 'MagTekMSR' Logical Device Name used as the JavaPOS MSR instantiated device object representing the MagTek non-encrypted MSR device.



Example of clicking the Properties button displaying the JavaPOS MSR populated Properties of the most recently swiped card.