

JPOS MSR Service Object Manual

This Document System was last updated on December 9, 2010

[Update history can be found here](#)

Contents

JPOS MSR Service Object Manual	1
Installation	2
File List	2
Run POSTest	3
Sample Code for Using MSR JPOS	4
Revisions	5

Installation

Below steps show how to install JDK and needed serial driver in the system.

1. To use Hyper-Terminal to verify your PC and MSR is worked normally.
2. Install JDK (www.sun.com), I assume you download jdk-1_5_0_21-windows-i586-p.exe. This file is also can be found in [Software] folder.
3. Set environment variable:
Control Panel -> System Properties -> Environment Variables
-> New
Variable name ="PATH"
Variable value="C:\Program Files\Java\jdk1.5.0_21\bin" <-----what your JDK installed path
-> New
Variable name ="JAVA_HOME"
Variable value="C:\Program Files\Java\jdk1.5.0_21" <-----what your JDK installed path
4. install java comm API for windows:
 - I. The comm API is located in the [Libraries] folder: comm.jar, javax.comm.properties and win32com.dll.
 - II. Copy win32com.dll to your <JDK>\bin directory.
* DOS prompt command example:
copy win32com.dll "c:\Program Files\java\jdk1.5.0_21\bin"
 - III. Copy comm.jar to your <JDK>\lib directory.
* DOS prompt command example:
copy comm.jar "c:\Program Files\java\jdk1.5.0_21\lib"
 - IV. Copy javax.comm.properties to your <JDK>\lib directory.
* DOS prompt command example:
copy javax.comm.properties "c:\Program Files\java\jdk1.5.0_21\lib"

Note: Above examples are the copy command under DOS prompt (if the jdk is located in C:\Program Files\Java\jdk1.5.0_21)

File List

Below is the JPOS needed files listed (located in [Libraries] folder):

- **comm.jar:** Java Communication API WIN32 communication library.
- **javax.comm.properties:** Used specify the devices and drivers that are available to the Java™ Communications API
- **jpos111.jar:** JPOS control file.
- **JposKeyHook.dll:** JNI hook key driver.
- **msr250so.jar:** MSR JPOS service library file.
- **postest.jar:** POSTEST java library.
- **win32com.dll:** Communication driver for comm.jar uses under Windows
- **xerces.jar:** JAVA document library file.

Run POSTest

The POSTest program is used to read MSR track data.

Below shows how to run this program.

Note: If your MSR is not connected to COM1, then please modify the JPOS.XML to set Port property value to the port name where MSR is connected.

1. Run MSRPOS.bat
2. Click the MSR tab.
3. Press the Open button.
4. Press the Claim button, and then check the Device enabled and Data event enabled check box.
5. Check TRACK1 Enable
6. Check TRACK2 Enable
7. Check TRACK3 Enable
8. Swipe the card.
9. You will find the data.

The screenshot shows the JavaPOSTester application window. The title bar reads "JavaPOSTester in Progress". The interface includes a menu bar with "File", a toolbar with various device control buttons, and a main panel. The "MSR" tab is selected. In the MSR section, the "Logical name" is "gigaMSR" and the status is "JPOS_S_IDLE". A list of checkboxes on the left allows for configuring data events and track enabling. The "MSR Reading" section displays the following data:

Track 1 Data:	0	B9999991234567890*STERLING/JOANNE^04121011445
Track 2 Data:	0	
Track 3 Data:	0	I9999991234567890=00101220100005095016020000005030001041210123456789
Track 4 Data:	0	
Account number:		B9999991234567890
Expiration date:		0412
Title:		
First name:		JOANNE
Middle initial:		
Surname:		STERLING
Suffix:		
Service Code:		
Track 1 discretionary data:		
Track 2 discretionary data:		
Data Count:		0

Buttons for "Clear Fields" and "Refresh Fields" are located at the bottom right of the MSR Reading section.

Sample Code for Using MSR JPOS

```
import jpos.*;
import jpos.config.*;
import jpos.config.simple.*;
import jpos.loader.*;
import jpos.loader.simple.*;
import jpos.profile.*;
import jpos.services.*;
import jpos.util.*;
import jpos.util.tracing.*;

public class JPOSMSRTester {
    public static void main(String args[]) {

        MSR msr = new MSR();

        //Open Device
        try
        {
            msr.open("MSR250");
        }
        catch(JposException e)
        {
            System.err.print(e);
        }

        //Claim device
        try
        {
            msr.claim(1000);
        }
        catch(JposException e)
        {
            System.err.print(e);
        }

        try
        {
            //Enable the device
            msr.setDeviceEnabled(true);
        }
    }
}
```

```

msr.setDataEventEnabled(true);

//Set wanted tracks, read all tracks
msr.setTracksToRead(0x0f);

//start reading
int i;
while(true)
{
    //waiting for card swipe
    i = msr.getDataCount();
    if(i>0)
    {
        //show track data
        System.out.println("Track1:");
        System.out.println(new String(msr.getTrack1Data()));
        System.out.println("Track2:");
        System.out.println(new String(msr.getTrack2Data()));
        System.out.println("Track3:");
        System.out.println(new String(msr.getTrack3Data()));
        break;
    }
}
//close device
msr.release();
msr.close();

}
catch(JposException e)
{
    System.err.print(e);
}
}
}

```

Revisions

2010/12/09

* Support USB HID Interface MSR reader

2009/1/8

* Original Release