

Shenzhen Yixin Technology Co., Ltd

JPOS MSR Specification

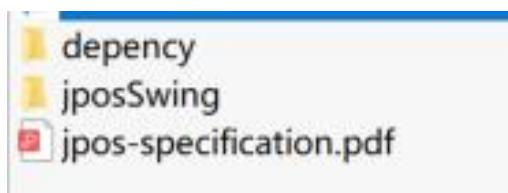
catalogue

1. doc description	3
2. SDK content	3
2.1. develop dependency library	3
2.1.1. Java library	3
2.1.2. dll	3
2.2. Sdk document	4
3. instructions	4
3.1. Add jar dependency	4
3.1.1. add java lib for eclipse	4
3.1.2. imprt jar for IDEA	6
3.2. Add dll library	7
3.2.1. Add to Eclipse, idea	7
3.3. SDK develop procedure	8
3.3.1. Craete a new project	8
3.3.2. Import jar	8
3.3.3. Import dll	8
3.3.4. Business process	9
3.3.4.1. Open MSR device and Add listener	9
3.3.4.2. Remove listener and close device	10
3.3.5. Reference code	10

1. doc description

This document describe how to use JPOS MSR plugin to devope magnetic card application.(MSR JPos plugin is developed by [Shenzhen Yixin Technology Co., Ltd](#))

2. SDK content



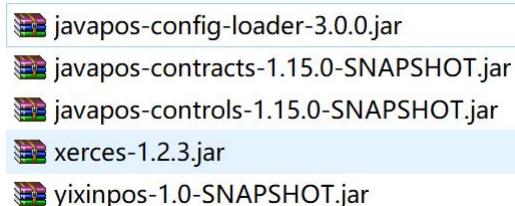
Dependency: java jar library and dll library

jposSwing: jpos demo project (maven)

Jpos-specification.pdf

2.1. develop dependency library

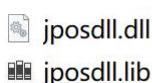
2.1.1. Java library



pos.jar: java library supported JPOS

Xecrs-1.2.3.jar: xml decode library

2.1.2. dll



Yinxing magnetic card reader dynamic libray.

2.2. Sdk document

Document contains 2 parts:

- jpos-specification.docx
- jpos 使用说明.docx

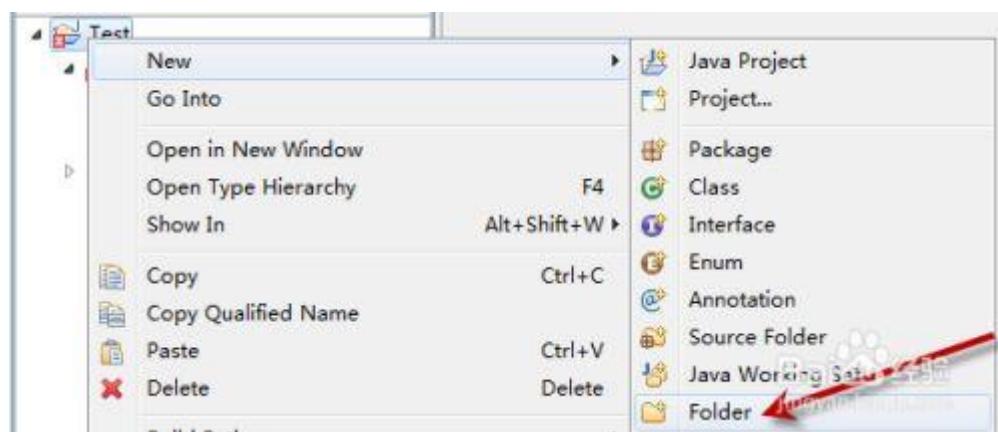
jpos-sepcification.docx: English version specification
jpos 使用说明.docx: Chinese version specification

3. instructions

3.1. Add jar dependency

3.1.1. add java lib for eclipse

1、right click project name, click 【New】-->【Floder】in turn, open new Folder window

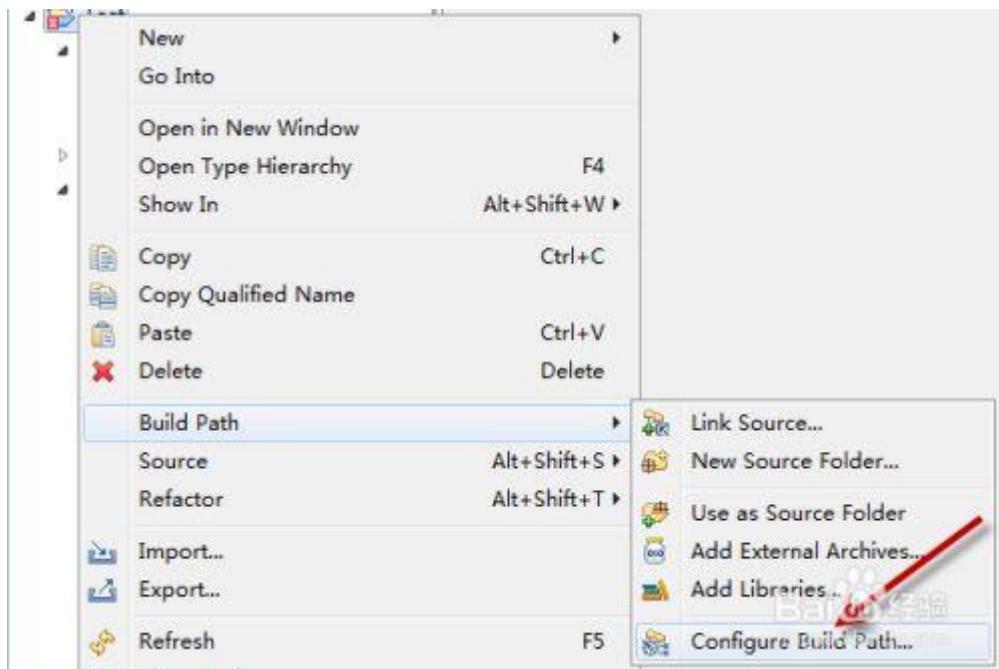


2、input Folder name 【lib】 , click 【ok】(jar usaully store in lib folder)

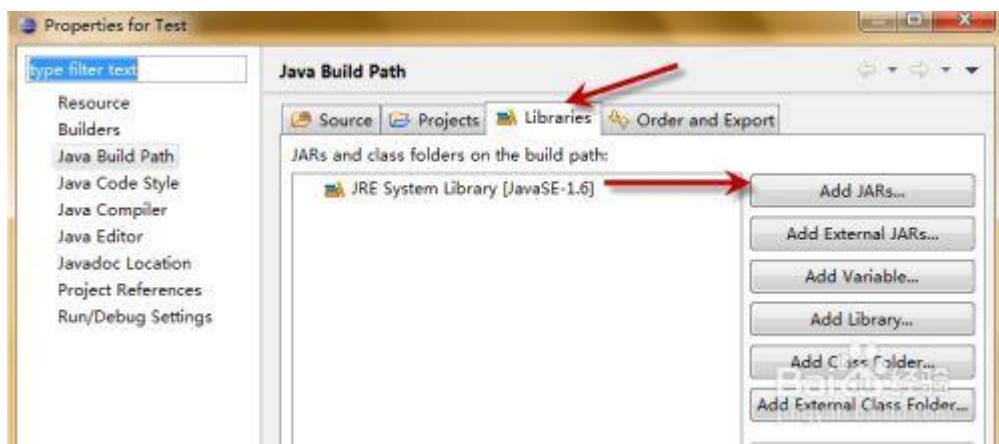


3、past jar file into the “lib” direcotry

4、right click “lib”,build path --->【Configure Build Path...】

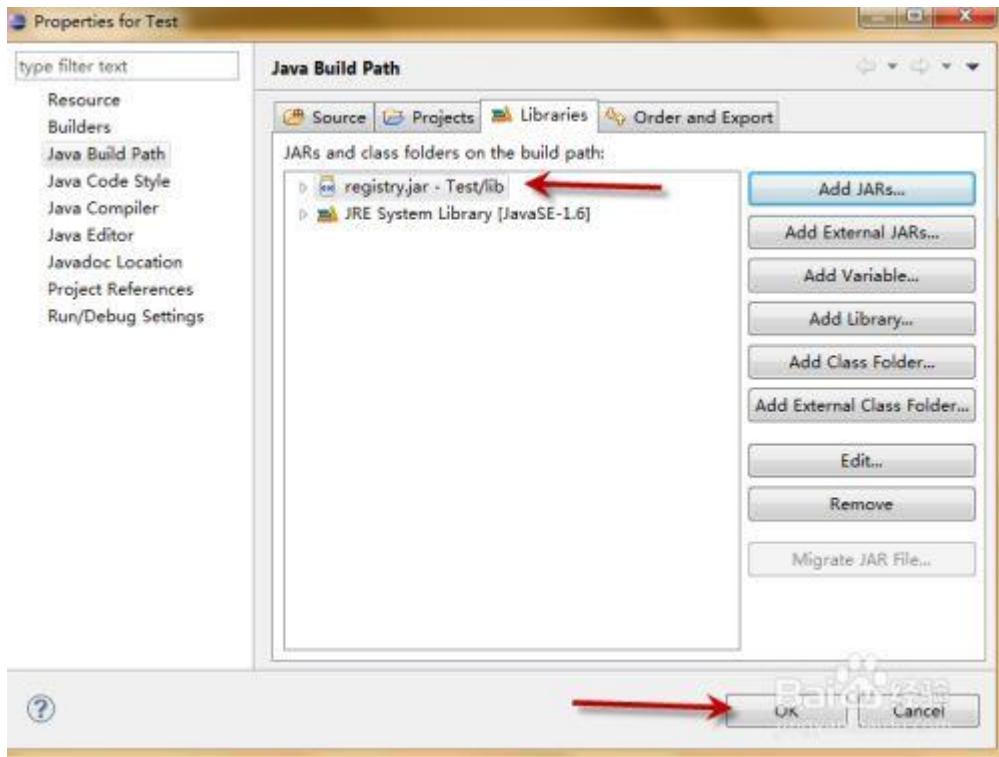


5、Select 【Libraries】 page at first, then click 【add JARs...】 button.



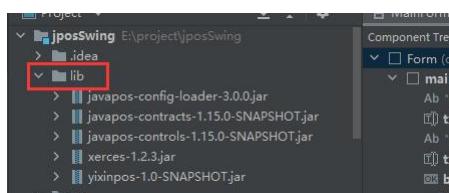
6、choose java jar in “lib” directory, then click “ok” button.

7、now, you will see the jar in 【Libraries】 page, then click 【OK】 button.



3.1.2. import jar for IDEA

- 1、Create “lib” folder in your project name , copy and paste java jar library into you folder, as shown in the figure below:



- 2、Add configuration to Maven pom.xml file, as shown in the figure below:

```

<dependency>
    <groupId>jpos</groupId>
    <artifactId>javapos-controls-1.15.0-SNAPSHOT</artifactId>
    <version>1.15.0-SNAPSHOT</version>
    <scope>system</scope>
    <systemPath>${project.basedir}/lib/javapos-controls-1.15.0-SNAPSHOT.jar</systemPath>
</dependency>

<dependency>
    <groupId>jpos</groupId>
    <artifactId>javapos-config-loader-3.0.0</artifactId>
    <version>3.0.0</version>
    <scope>system</scope>
    <systemPath>${project.basedir}/lib/javapos-config-loader-3.0.0.jar</systemPath>
</dependency>

<dependency>
    <groupId>jpos</groupId>
    <artifactId>javapos-contracts-1.15.0-SNAPSHOT</artifactId>
    <version>1.15.0-SNAPSHOT</version>
    <scope>system</scope>
    <systemPath>${project.basedir}/lib/javapos-contracts-1.15.0-SNAPSHOT.jar</systemPath>
</dependency>

<dependency>
    <groupId>com.yixin</groupId>
    <artifactId>yixinpos</artifactId>
    <version>1.0-SNAPSHOT</version>
    <scope>system</scope>
    <systemPath>${project.basedir}/lib/yixinpos-1.0-SNAPSHOT.jar</systemPath>
</dependency>

<dependency>
    <groupId>xerces</groupId>
    <artifactId>xerces</artifactId>
    <version>1.2.3</version>
    <scope>system</scope>
    <systemPath>${project.basedir}/lib/xerces-1.2.3.jar</systemPath>
</dependency>

<dependency>
    <groupId>org.hamcrest</groupId>
    <artifactId>hamcrest-library</artifactId>
    <version>1.3</version>
    <scope>test</scope>
</dependency>

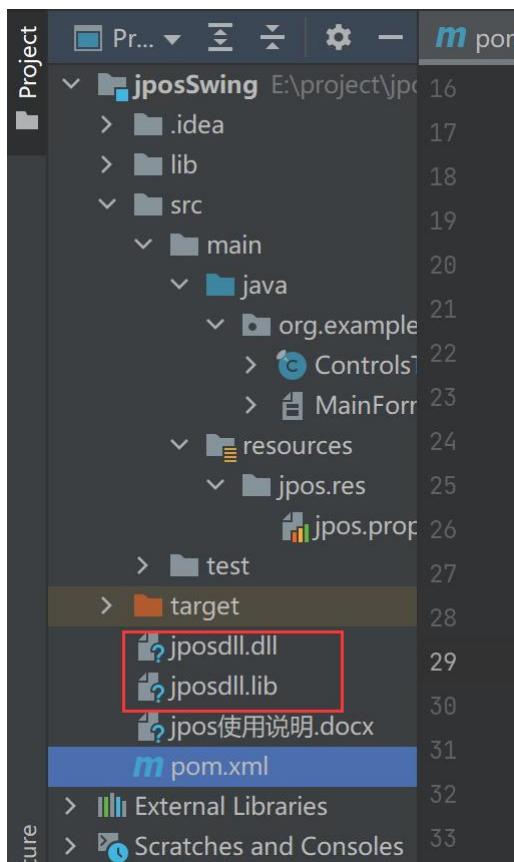
```

(Note: groupId, artifactId, version, scope, systemPath option)

3.2. Add dll library

3.2.1. Add to Eclipse, idea

Copy “jpos.dll, jpos.lib” into you project direcotry, as shown in the figure below:



Eclipse the same as idea.

3.3. SDK develop procedure

3.3.1. Create a new project

User idea or eclipse etc, to create new java project.

3.3.2. Import jar

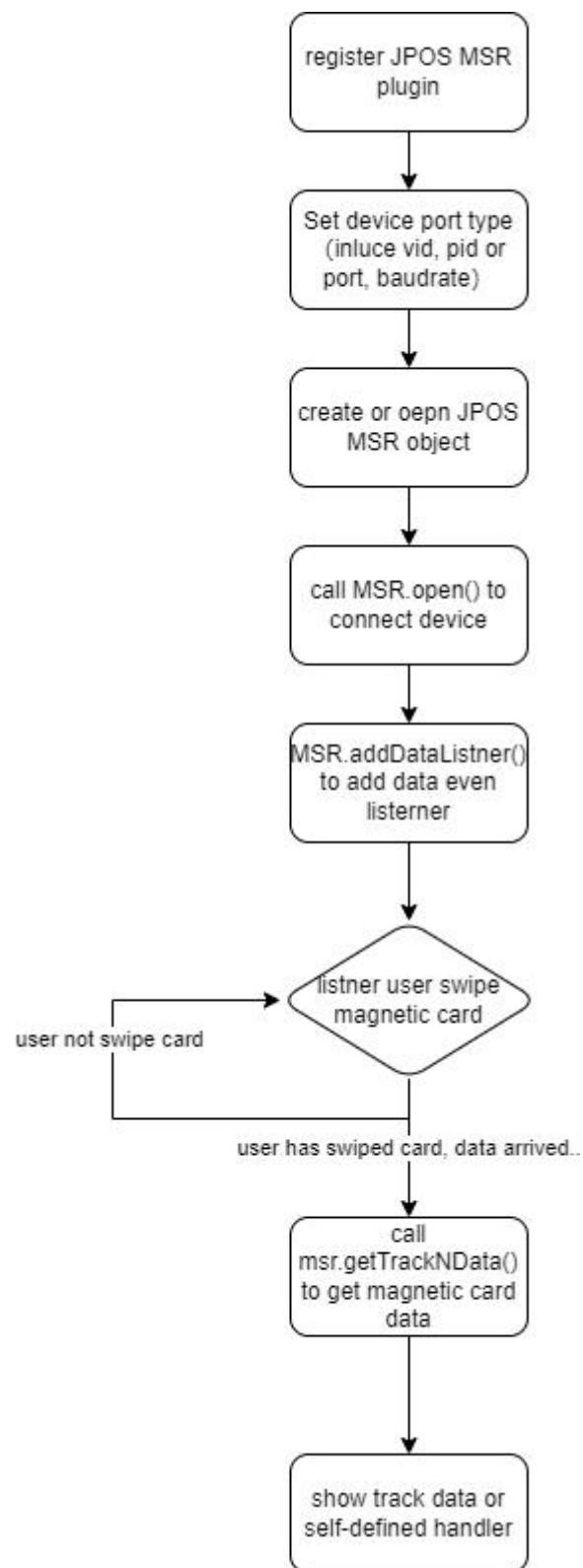
Reference [add jar dependency](#)

3.3.3. Import dll

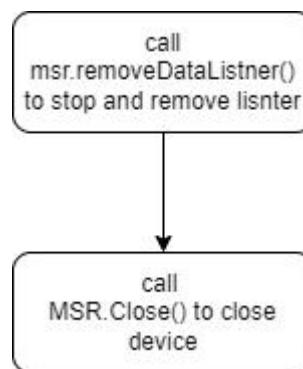
Reference [add dll dependency](#)

3.3.4. Business process

3.3.4.1. Open MSR device and Add listener



3.3.4.2. Remove listener and close device



3.3.5. Reference code

as shown in the figure below (More , please read “jposSwing” project source code file **MainForm.java**):

```
private JButton btnOpen;
private JTextField textField01;
private JTextField textField02;
private JTextField textField03;
private JPanel mainPanel;

private static final String YX_MSR_SERVICE = "yxMsrService";
private static JposEntry pos = null;
private static MSR control = null;
private static DataListener listener = null;

public MainForm() {
    //open dev button click handler
    btnOpen.addActionListener(new ActionListener() {
        @Override // Invoked when an action occurs.
        public void actionPerformed(ActionEvent e) {
            // [1] 注册读写信息(Register JPOS plugin)
            if ( null == pos ) {
                JposEntryRegistry registry = JposServiceLoader.getManager().getEntryRegistry();
                pos = controlTestHelper.createJposEntry( category: "MSR", YX_MSR_SERVICE, version: "1.19", YX_MSR_SERVICE ); // Creates a JposEntry for the given open name
                pos.addProperty( "portType", "NIM" );
                int txtId = Integer.parseInt( txt_vendor_id.getText() ), radio_16; // Returns the text contained in this TextComponent. If the underlying document is null, and pid is set, returns the document's pid; otherwise, returns the vendor id.
                pos.addProperty( "productID", txt_id.getText() ); // vendorId (contact supplier to get it)
                pos.addProperty( "productID", pid ); // productid (contact supplier to get it)
                registry.addJposEntry( pos );
            }
            // [2] 设置端口属性(set port type information: portType: HID, COM)
            pos.addProperty( "portType", "NIM" );
            int txtId = Integer.parseInt( txt_vendor_id.getText() ), radio_16; // Returns the text contained in this TextComponent. If the underlying document is null, and pid is set, returns the document's pid; otherwise, returns the vendor id.
            pos.addProperty( "productID", txt_id.getText() ); // vendorId (contact supplier to get it)
            pos.addProperty( "productID", pid ); // productid (contact supplier to get it)
            registry.addJposEntry( pos );
        }
    });
}

// [3] 打开对应的JPOS对象(Open JPOS MSR object)
if (null == control) {
    control = new MSR();
    try {
        control.open(YX_MSR_SERVICE);
    } catch (JposException ex) {
        ex.printStackTrace(); // Prints this throwable and its backtrace to the standard error stream. This method prints a stack trace for this
        // open MSR control failed, unregister jpos plugin and exit
        JposEntryRegistry registry = JposServiceLoader.getManager().getEntryRegistry();
        registry.removeJposEntry(YX_MSR_SERVICE);
        pos = null;
        //MSR controller set to null
        control = null;
    }
}
```

Details refer to:

