Application Note

Subject: How to compile and run JavaPOS sample provided by Star on the TSP100 series.
Date: November 19, 2008
Star Printers: TSP100 series
Printer used for this application note: TSP113
Software Requirement: One of the Most Updated Java Environments

This Application Note will walk you as a software engineer thru compiling and running the JavaPOS sample (driver) provided by Star on your Star TSP100 series printers.

Unlike Star's other printers, the JPOS package for the TSP100 series cannot be downloaded from the Star Micronics' website. Nor could it be simply copied and pasted on your PC from the CD.

Step 1: Installing printer driver and testing communication

Take the CD that was originally supplied with your printer model. Install the Windows driver. If you are installing TSP100, be sure to use CD version 3.0 else JavaPOS may not function accurately. If your product was shipped with a lower version, contact Star Micronics Technical Support.

Once you have printer driver installed, send a "Print Test Page" to test communication between your PC and the printer via printers and faxes.

Contact Star Technical Support at (732) 623-5500 / userhelp@starmicronics.com if you require assistance with installing the driver.

Step 2: Locating JPOS driver

1. Open C drive – Program Files – StarMicronics – TSP100

    You would open C:\Program Files\StarMicronics\TSP100 – if you have the TSP100 USB printer installed. If your printer is TSP100LAN – you would open the C:\Program Files\StarMicronics\TSP100LAN. If your printer is TSP100GT – you would open C:\Program Files\StarMicronics\TSP100GT)

    Then, open the software folder within the TSP100 folder.   Within the software folder there should be two folders named with numerical values (date). You may see different dates on your folders depending on your printer model and different CD versions.

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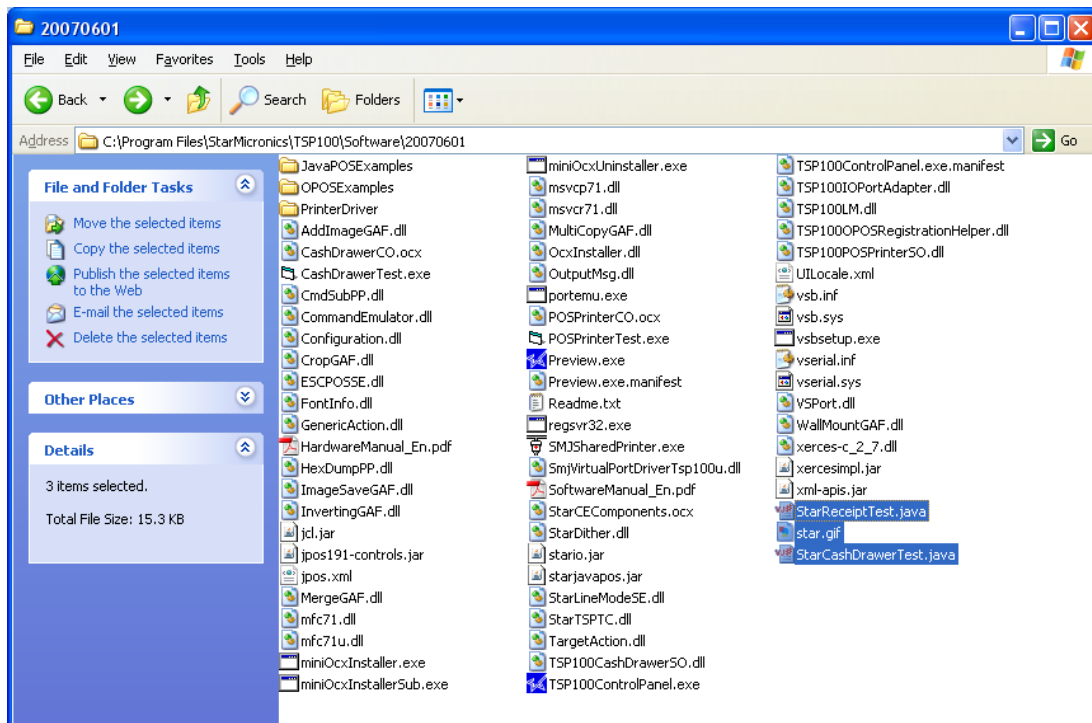engineeringsupport@starmicronics.com

Try and open the two folders that are in the software folder. If you are using TSP100 version 3.0, the correct folder is 20070601. The content of the folder that is required is similar to the below screenshot.
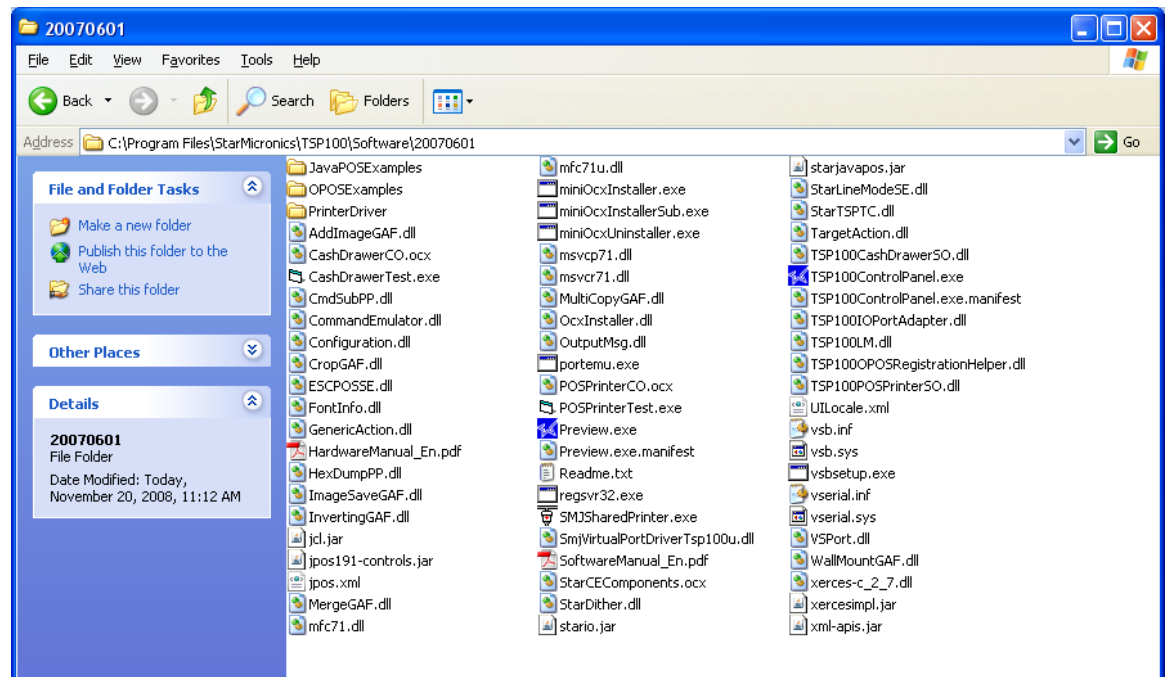
These are required jar file. If you open the JavaPOSExample folder, it has the java source codes.
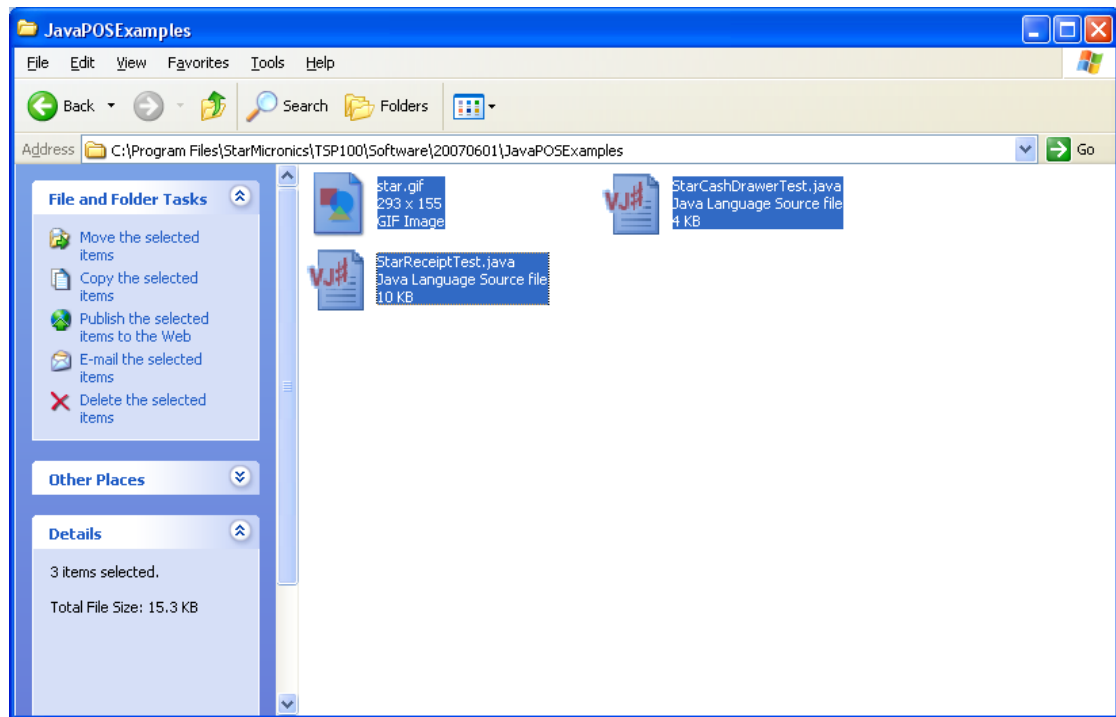
2. Copy the three files found in the JavaPOSExamples folder.

3. Go one directory up and paste the copied files into the parent folder.
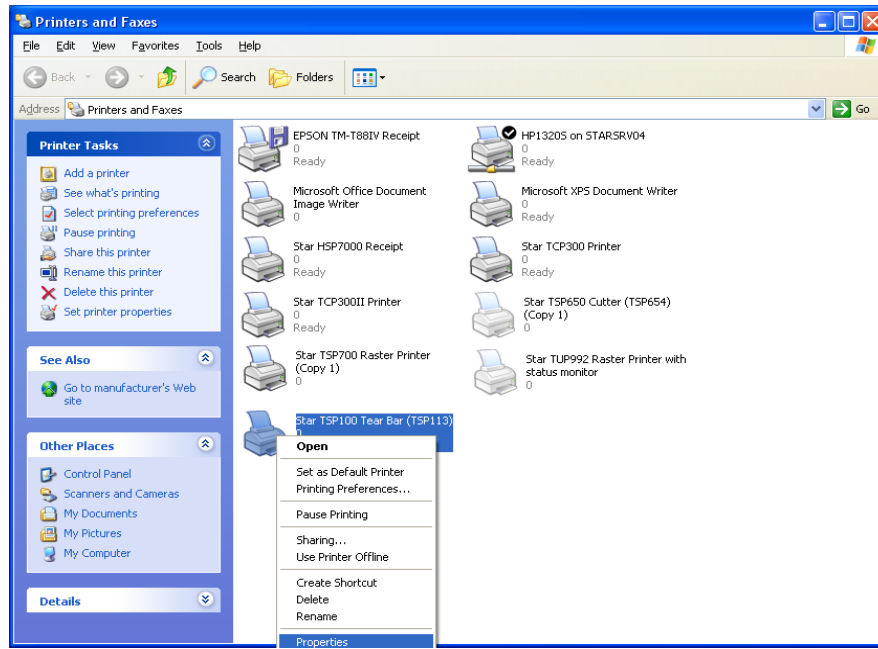
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Step 3: Creating JPOS Registry file

To create the jpos.xml file, you need to open the configuration utility of the printer.

1. From printers and faxes, select the appropriate star printer and right click to select and click on "Properties".
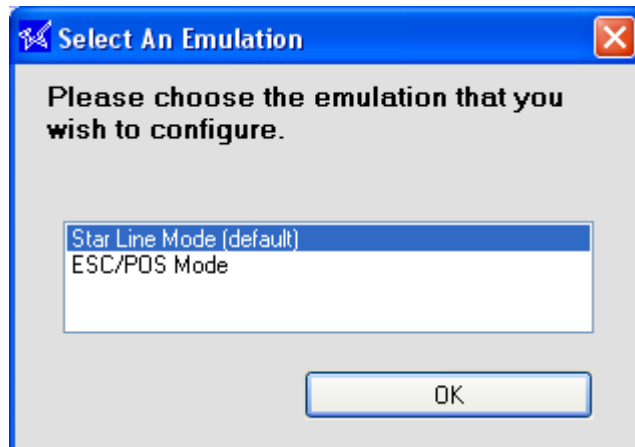

2. Clicking on properties will bring up the following GUI.

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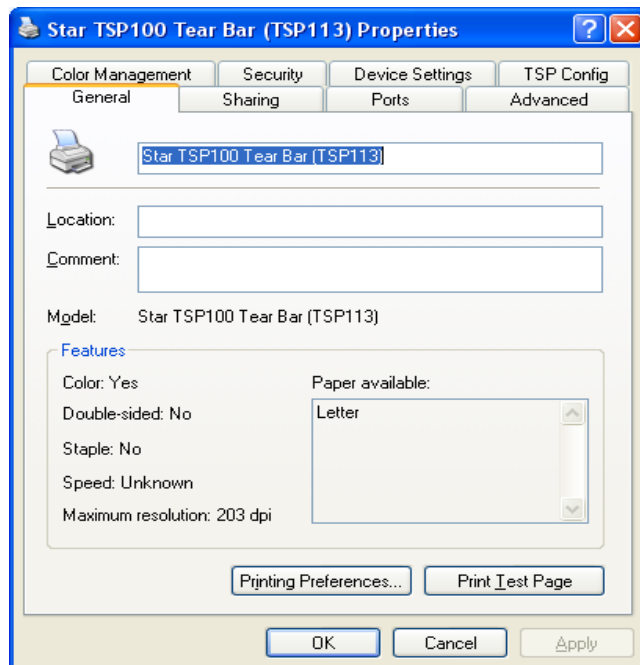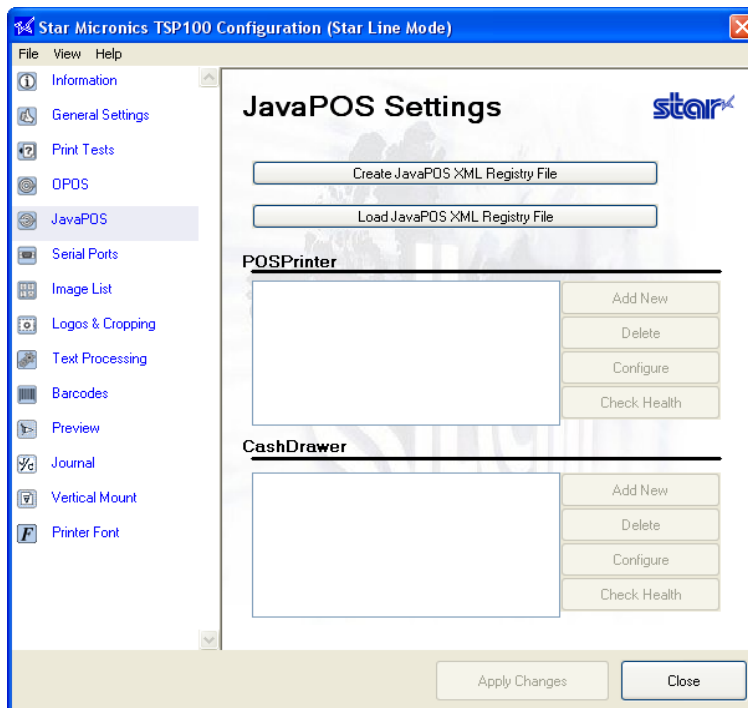
2. Go to the TSP Config tab.
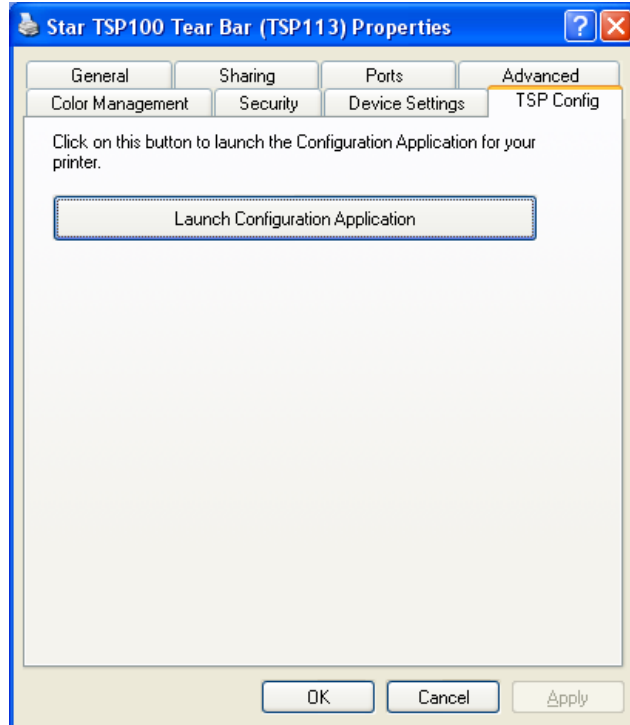
3. On the TSP Config tab click on "Launch Configuration Application."

4. Be sure to select "Star Line Mode (default)" for JPOS and then click "OK."

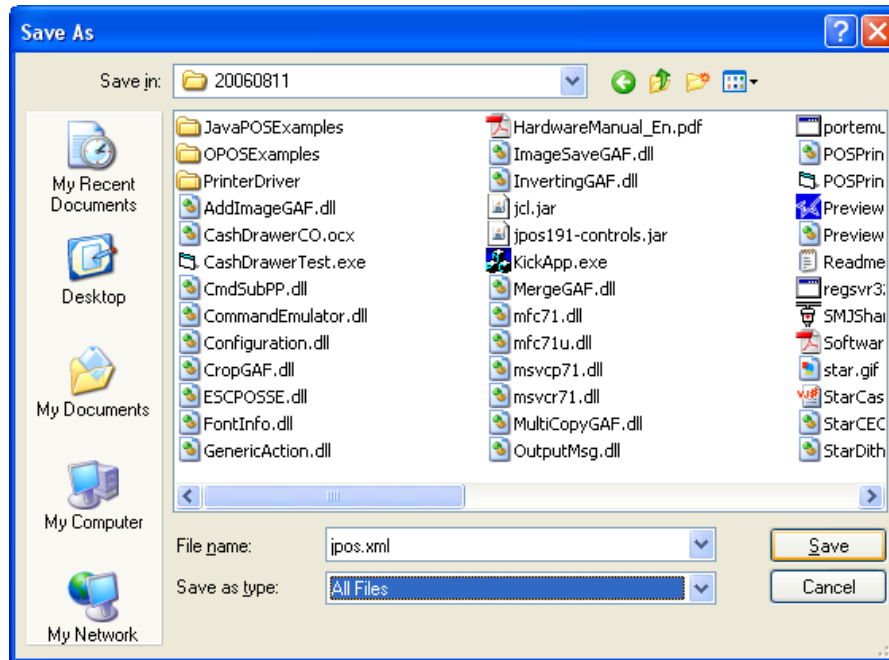5. Clicking "OK" brings up the following utility.

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On the right hand side, click on "JavaPOS"

6. Click on "Create JavaPOS XML Registry File" to create the jpos.xml file.

7. Be sure to browse to the path where the JPOS driver is on your C drive. Click on "Save"

8. Click on "Load JavaPOS XML Registry File" and follow step 9 to open.

9. Click on "Add New." For new device name, enter any name of your choice or opt to leave as default. Then click "OK"

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10. Highlight the device name, and click "Configure" and "Accept"
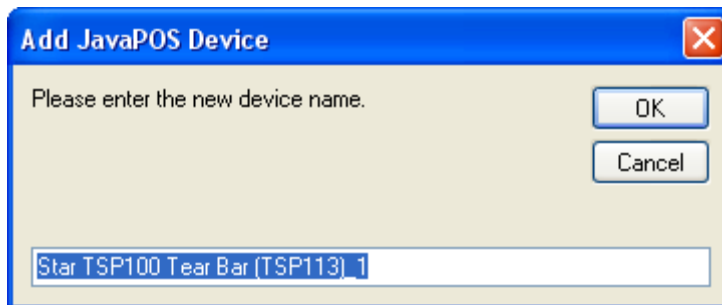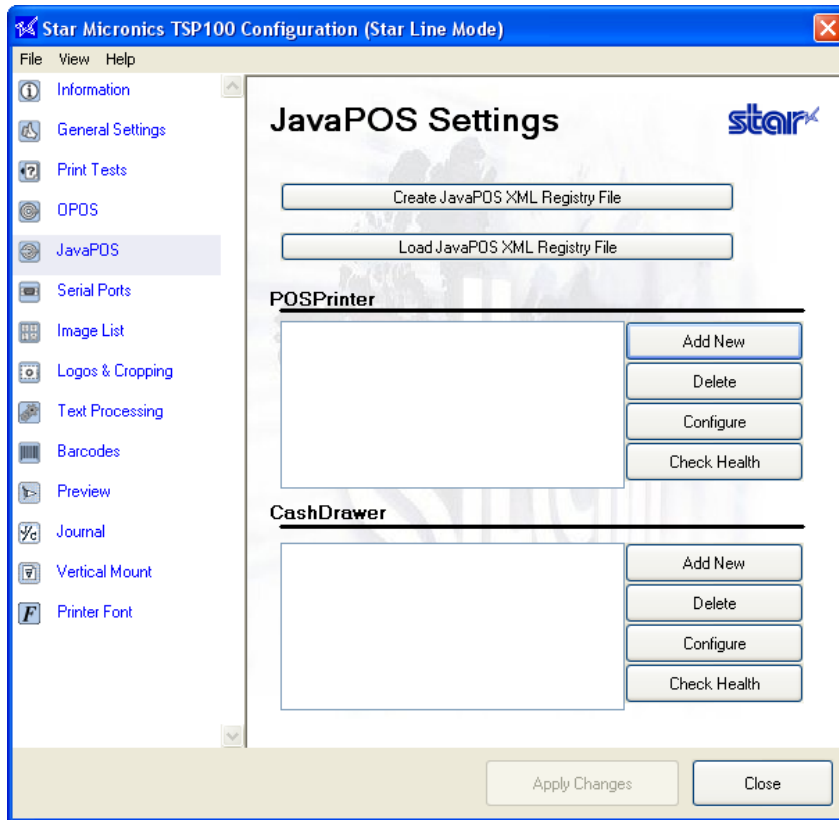
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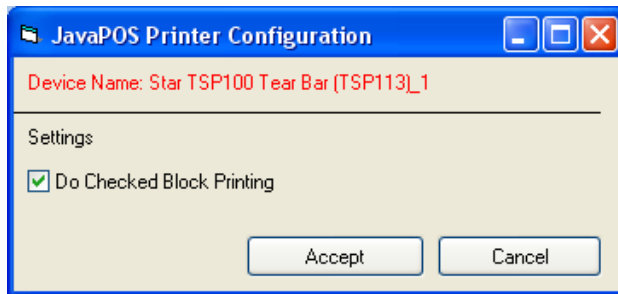
11. Click to Apply Changes then "Check Health". Within a few seconds delay, the printer must print a sample check health receipt. The following screen should also display.

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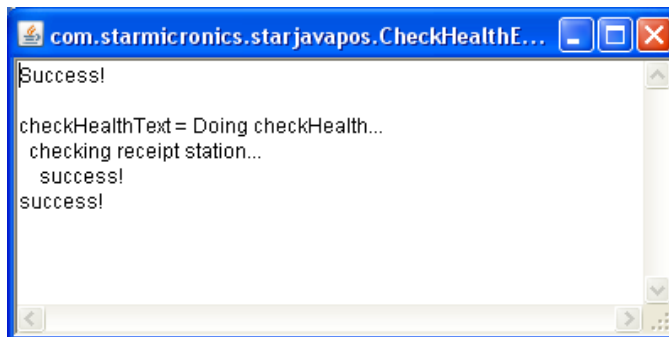
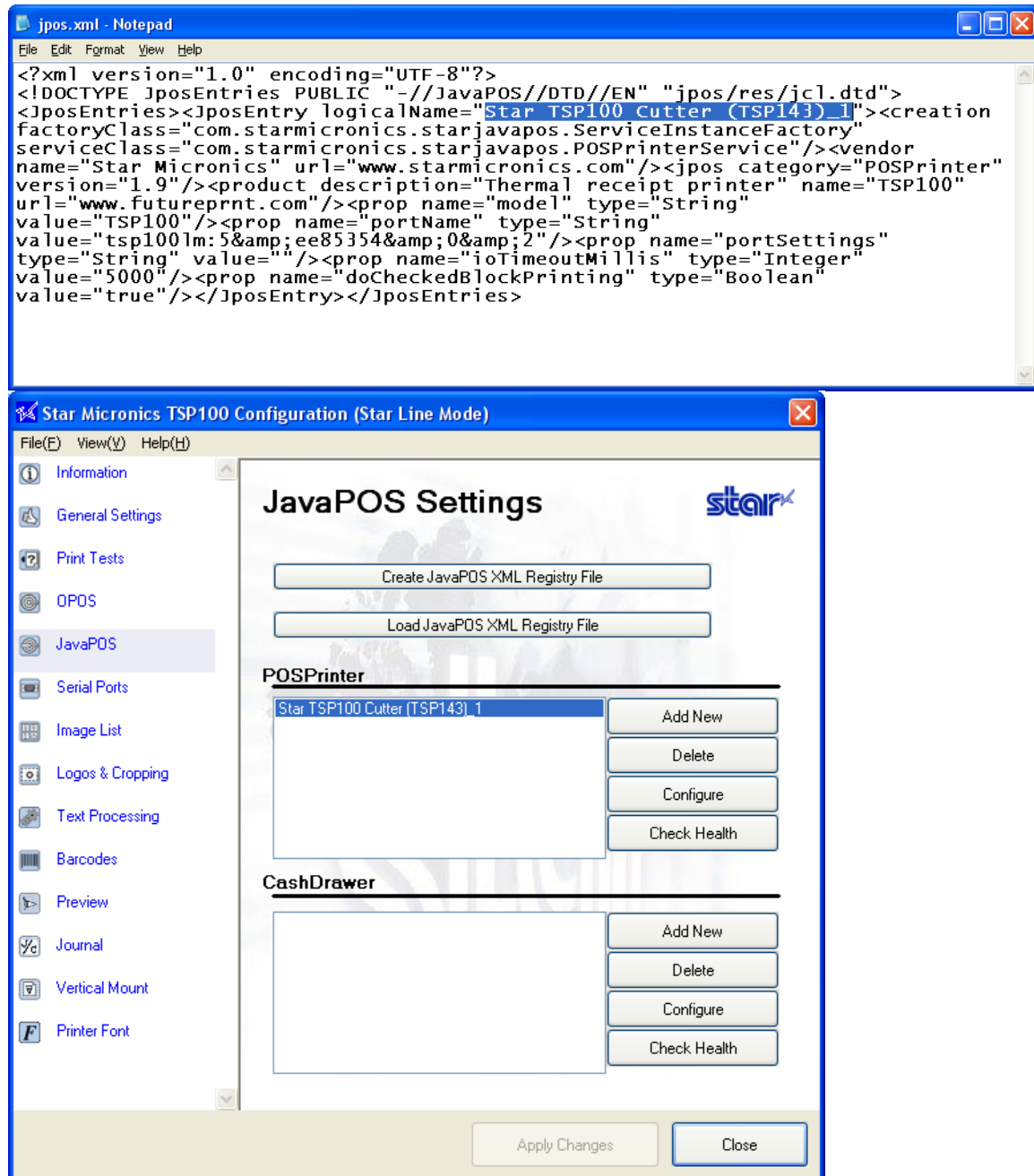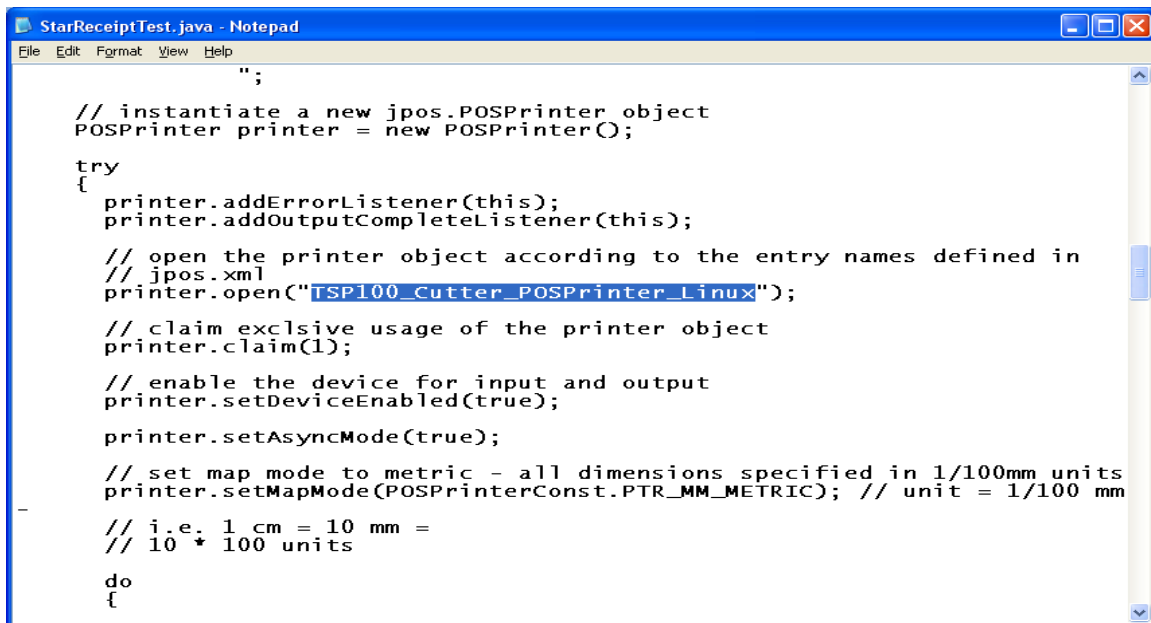If clicking on check health seems to do nothing, be sure you have all Java updates on your computer. Check health must be successful else there will be errors in compiling JPOS application.

Step 3: Compiling and Running JPOS Application

1. Right click and Edit the jpos.xml file you created earlier. Be sure the logical name under jpos.xml and JPOS printer name under the configuration utility are identical.

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2. Double click to open source file "StarTestReceipt.java". Under printer.open statement, be sure to change the printer name to match the name under jpos.xml registry and save changes.

```
StarReceiptTest.java - Notepad
File  Edit  Format  View  Help
                          ";
    // instantiate a new jpos.POSPrinter object
    POSPrinter printer = new POSPrinter();

    try
    {
      printer.addErrorListener(this);
      printer.addOutputCompleteListener(this);

      // open the printer object according to the entry names defined in
      // jpos.xml
      printer.open("TSP100_Cutter_POSPrinter_Linux");

      // claim exclsive usage of the printer object
      printer.claim(1);

      // enable the device for input and output
      printer.setDeviceEnabled(true);

      printer.setAsyncMode(true);

      // set map mode to metric - all dimensions specified in 1/100mm units
      printer.setMapMode(POSPrinterConst.PTR_MM_METRIC); // unit = 1/100 mm

      // i.e. 1 cm = 10 mm =
      // 10 * 100 units

      do
      {
```

```
StarReceiptTest.java - Notepad
File  Edit  Format  View  Help
                          ";
    // instantiate a new jpos.POSPrinter object
    POSPrinter printer = new POSPrinter();

    try
    {
      printer.addErrorListener(this);
      printer.addOutputCompleteListener(this);

      // open the printer object according to the entry names defined in
      // jpos.xml
      printer.open("Star TSP100 Cutter (TSP143)_1");

      // claim exclsive usage of the printer object
      printer.claim(1);

      // enable the device for input and output
      printer.setDeviceEnabled(true);

      printer.setAsyncMode(true);

      // set map mode to metric - all dimensions specified in 1/100mm units
      printer.setMapMode(POSPrinterConst.PTR_MM_METRIC); // unit = 1/100 mm

      // i.e. 1 cm = 10 mm =
      // 10 * 100 units

      do
      {
```
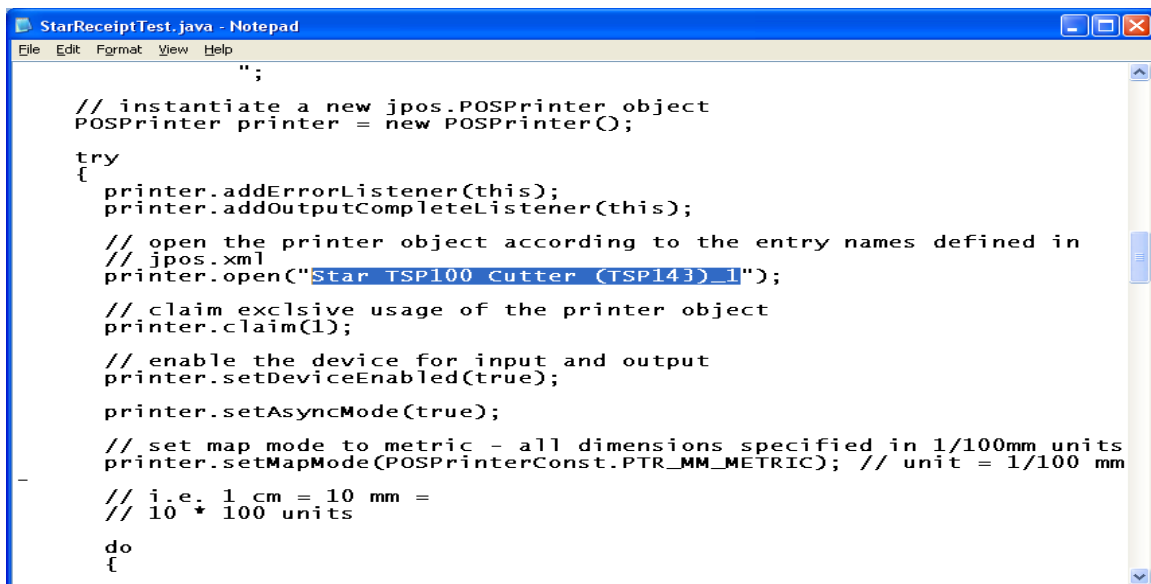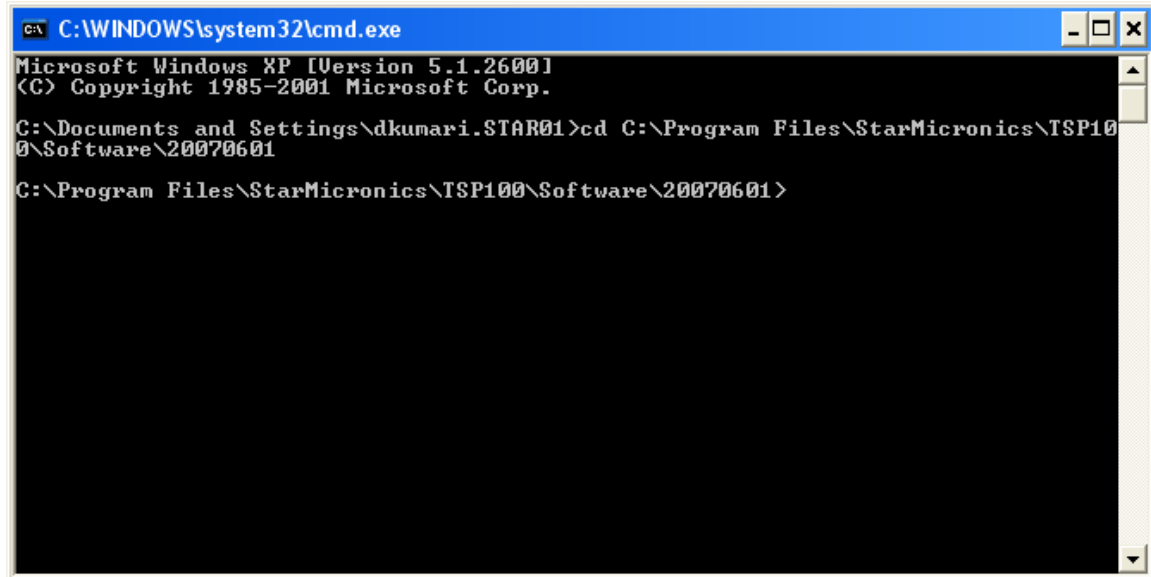
3. Open a Command Prompt (Star – Programs – Accessory – Command Prompt)

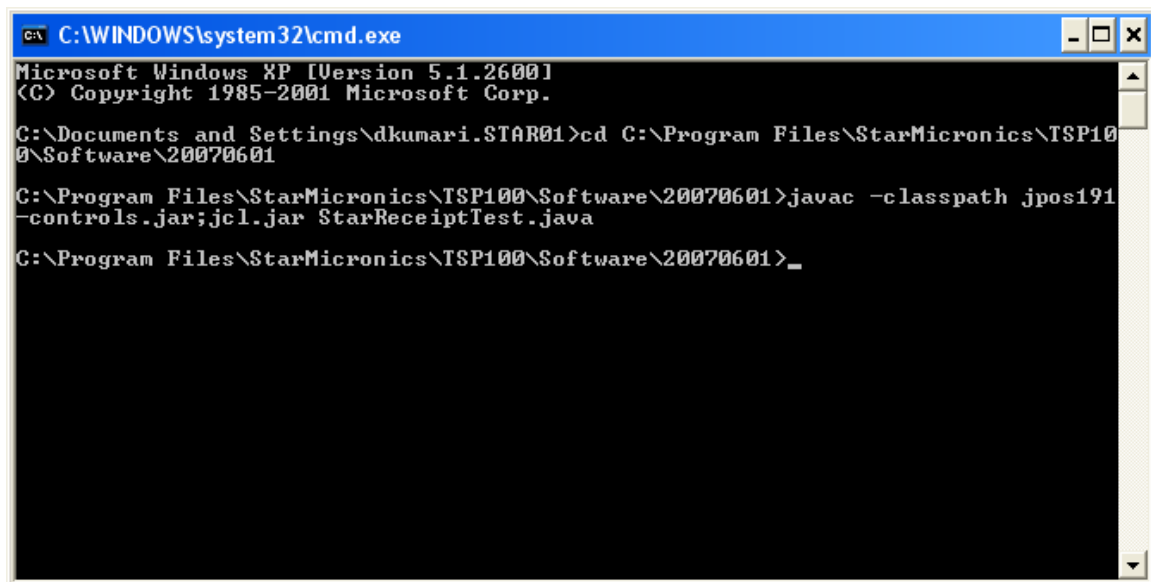4. Change to the directory that has the JPOS driver on your C drive.

```
C:\WINDOWS\system32\cmd.exe                                    _ □ ×
Microsoft Windows XP [Version 5.1.2600]
(C) Copyright 1985-2001 Microsoft Corp.

C:\Documents and Settings\dkumari.STAR01>cd C:\Program Files\StarMicronics\TSP10
0\Software\20070601

C:\Program Files\StarMicronics\TSP100\Software\20070601>
```

5. In the "StarReceiptTest.java" under the usage instructions for windows, copy the commands to compile from command line (javac -classpath jpos191-controls.jar;jcl.jar StarReceiptTest.java) and paste it on the command prompt window and press enter.

```
C:\WINDOWS\system32\cmd.exe                                    _ □ ×
Microsoft Windows XP [Version 5.1.2600]
(C) Copyright 1985-2001 Microsoft Corp.

C:\Documents and Settings\dkumari.STAR01>cd C:\Program Files\StarMicronics\TSP10
0\Software\20070601

C:\Program Files\StarMicronics\TSP100\Software\20070601>javac -classpath jpos191
-controls.jar;jcl.jar StarReceiptTest.java

C:\Program Files\StarMicronics\TSP100\Software\20070601>_
```
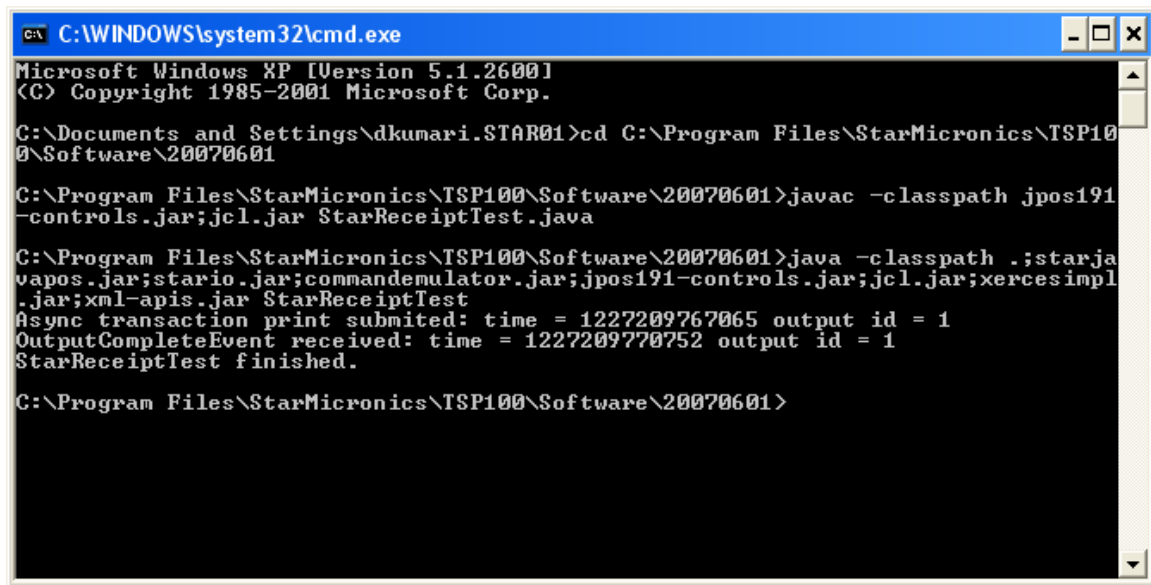
The command "javac -classpath jpos191-controls.jar;jcl.jar StarReceiptTest.java" converts the course code into bytecode for Java to understand, in result the "StarReceiptTest.clss" has now created.

6. Type the following command into the prompt command window to run the program

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java -classpath .;starjavapos.jar;stario.jar;commandemulator.jar;jpos191-
controls.jar;jcl.jar;xercesimpl.jar;xml-apis.jar StarReceiptTest

```
C:\WINDOWS\system32\cmd.exe

Microsoft Windows XP [Version 5.1.2600]
(C) Copyright 1985-2001 Microsoft Corp.

C:\Documents and Settings\dkumari.STAR01>cd C:\Program Files\StarMicronics\TSP10
0\Software\20070601

C:\Program Files\StarMicronics\TSP100\Software\20070601>javac -classpath jpos191
-controls.jar;jcl.jar StarReceiptTest.java

C:\Program Files\StarMicronics\TSP100\Software\20070601>java -classpath .;starja
vapos.jar;stario.jar;commandemulator.jar;jpos191-controls.jar;jcl.jar;xercesimpl
.jar;xml-apis.jar StarReceiptTest
Async transaction print submited: time = 1227209767065 output id = 1
OutputCompleteEvent received: time = 1227209770752 output id = 1
StarReceiptTest finished.

C:\Program Files\StarMicronics\TSP100\Software\20070601>
```

As a result this prints a sample receipt.

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