MPOST Java Installation Guide

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Overview

There are 5 major sections to the Java MPOST package.

- **MPOST Library Jar** – This file (MEI-java.jar) is the API that is used to interface with MEI bill acceptors. (Requires Serial Comm Library)
- **MPOST Demo Jar** – (Optional) This file (MEI-java-GUI.jar) is a small demonstration application that uses the MPOST Library Jar file to show some of its capabilities. (Requires MPOST API and Serial Comm Library)
- **Serial Comm Library** – External library file that is used to facilitate serial communications in Java. This is required by the MPOST Library Jar and the file can differ based on the operating system used.
- **MPOST Demo Application Source Code** – This section contains the source code the demonstration application. It can be used as an example reference for developing the host implementation.
- **Javadocs** – (Optional) HTML based documentation that can be referenced by the programmer to understand the purpose and use of the classes, methods and properties of the MPOST Library Jar.

Upgrading

When upgrading an existing installation of Java MPOST. It should only be necessary to replace the new files with the old ones. Please refer to the release note to see which files have changed and should be updated.

Installing For the First Time

Prerequisites

It is assumed that the computer has a properly configured JRE installed. To ensure that the environment variables are set correctly, execute "java –version" on the command line; there should be a description of the currently installed version of java. The minimum JRE required is 1.4.

Installing the Packages

Demo and API

The Demonstration application and the API can be placed anywhere on the computer. The only requirement is that if you wish to execute the Demo application, the MPOST API Library must be located in a folder named "lib" within the same directory as the Demo application jar. This is the default structure found in the installation package and is depicted below:

- MEI-java-GUI.jar

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- lib <folder>
    - MEI-java.jar

Serial Comm Library

The Serial Comm Library file is the only file that needs to be placed in a specific location on the computer. This location differs based on the operating system.

Windows

On windows based computers, there is only one file: rxtxSerial.dll. This file must be placed in the bin directory of the active Java JRE. Example: "C:\Program Files\Java\jre6\bin"

Linux

Linux machines have a selection of librxtxSerial.so files. Only one file is needed and should match the architecture of the computer (most 32 bit linux machines should use the i686 version). Linux distributions must have the file present in the lib/<arch> folder. Some examples are listed below:

- Linux (32bit) = /usr/lib/jvm/java-6-sun/jre/lib/i386
- Linux (64bit) = /usr/lib/jvm/java-6-openjdk/jre/lib/amd64

As a quick reference guide, the following architectures are described below:

- X86_64 is for 64-bit AMD processors
- Ia64 is for Intel Xeon processors
- I386/i586/i686 are all for 32-bit x86 based chips (Most likely the applicable version)

Javadocs and Demo Source Code

The javadocs can be placed at any location on the computer. They can be opened with a browser application by double clicking the index.html file.

The demonstration source code can be placed anywhere on the hard drive as well. To open the source code application, the user will need NetBeans IDE available at http://netbeans.org/.

Troubleshooting

There are a few frequently encountered problems when attempting to run the Demo application for the first time. These are listed below:

Exception: java.lang.UnsatisfiedLinkError: no rxtxSerial in java.library.path

This exception means that the associated DLL or SO library file is not located in the java directory. See Serial Comm Library for details on how to ensure this is valid. Also, please ensure the file is located in the currently used JRE. If there are multiple versions of the JRE or JDK, the file must be placed in the one that is currently being used.

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Exception: java.lang.UnsatisfiedLinkError: <…> wrong ELF class: … (Possible cause: architecture word mismatch)

This exception is raised if the incorrect rxtxSerial library was placed in the java lib folder. Only applicable for Linux installations. Please try a different library file. See section Serial Comm Library for more details.

Exception: java.lang.NoClassDefFoundError: com/meiglobal/ebds/api/pub/AcceptorException

This exception is thrown when the GUI application cannot find the MPOST API library. The GUI application expects the MEI-java.jar file to reside in a folder called "lib" on the same level as the GUI Application jar file (MEI-java-GUI.jar).

Application does not start when running the MEI-java-GUI.jar file.

This is most likely due to an exception. Please execute the jar file in a command line environment in order to see the exception.

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