Installing the Mettler-Toledo JPOS Driver on Windows Systems

Setup your Java Environment:

In a Windows Command Prompt window enter the command: "*java -version*" to confirm that you have Java installed on the target Windows system.

1. To get the Windows command prompt: click the Windows Start button and then type "cmd" in "*Search programs and files*" window and hit return.
2. Execute the "java -version" command.
    a. It should return something like: "java version 1.8.0_161" (or newer).
3. If you don't have Java on your system, go to Google.com and type in "java download".
    a. It is important that you install the correct Java version, especially concerning 32 vs. 64-bits. On 32-bit Windows OS's that means installing 32 bit Java.
    b. See the section below: Selecting the proper JAVA version to insure that you have, or that you are downloading, the correct Java version.
4. When done, repeat this Step to verify that you have installed Java correctly.

Selecting the proper JAVA version

On a 32-bit Windows system, you should install the 32-bit version of Java. On a 64-bit Windows system, you can install either the 32 or 64-bit version of Java

To determine if your installed Java is 32 or 64 bits and enabled:
- Go to Start->Control Panel->Programs->Java
- Select the Java tab.
- Select View
    o If the Architecture tab says "x86" then it is a 32 bit Java installation.
    o If the Architecture tab says "x86_64" then it is a 64 bit Java installation
- Also in View: verify that Java is "Enabled" (checked).

Before going to the next section your Java must be installed and enabled.

Installing JavaPOS:

1. If you have an older "*MT JavaPOS App version n.nn*" installed on your PC, uninstall it now.
    a. Start->Control Panel->Uninstall a program: *MT JavaPOS App version n.nn*.
    b. I.e., check the version *n.nn* against the version on the Retail Wiki site.

2. Download the correct JPOS installation package from the Retail Wiki site into a new folder on the target Windows machine.
    a. Note: it should look something like this (it may be newer): *MTScale-JPOS Released-20180905.exe*

3. Execute the JPOS installation package (.exe) from the previous step.
    a. Accept the End User License Agreement (EULA) if you agree with its terms.
    b. Choose an installation directory.
    c. By default the JPOS driver will be installed in *C:\Mettler Toledo\MT JavaPOS App*

<p style="text-align: center;"><u>Configure JavaPOS:</u></p>

1. Note the following directories/files in the *C:\Mettler Toledo\MT JavaPOS App* directory:
    a. JposLibs:
        i. Contains the Java archive files used by the driver and test application.
    b. MTScaleService:
        i. The MTScaleService/mtscale.jar file contains JavaPOS Device Service classes compliant with JavaPOS 1.82.
    c. nrjavaserial:
        i. Contains the communications drivers you'll need to communicate with the Ariva scale.
    d. jpos.xml:
        i. <u>This is the configuration file used to configure your scale</u>.
        ii. You'll need to configure this file, below, to match your POS system.
        iii. Contains three logical scale entries: Dialog06, Dialog06-PIPE and MettlerScale8217.
        iv. See below for editing instructions.
    e. jpos_orig.xml:
        i. Backup copy of the above.
    f. mtscaletestapp.jar
        i. The test application jar file.
    g. startMTScaleTestApptest.bat
        i. The batch file that runs the test application by double-clicking on it.
        ii. <u>Note</u>: you may need to edit this file to provide the actual locations of the *JposLibs*, *mtscale.jar* and *jpos.xml* files.

2. Edit the *C:\Mettler Toledo\MT JavaPOS App\jpos.xml* configuration file as follows for the *<u>logicalName=MettlerScale8217</u>* or the *<u>logicalName=MettlerScaleDialog06</u>* entries.

    a. MAKE SURE YOU ARE EDITING THE CORRECT ENTRY!
        i. In N. American *<u>logicalName=MettlerScale8217</u>* will typically be used.
        ii. In Europe *<u>logicalName=MettlerScaleDialog06</u>* will typically be used.

    b. The *jpos.xml* file entry "<prop name="port" value="COMn"/>", the COM port name "COM1" needs to be changed to match whatever COM port you are using.

    c. The *jpos.xml* file entry <prop name="baudrate" value="9600"/> indicates the communication speed appropriate for the scale. If this property is missing or invalid then the default value 9600 is used.

    d. Change the COM port parameters as needed (baud rate, parity, etc.).
        i. Parity: 1 is for Odd Parity, 2 is for Even Parity, 0 is for No Parity.
        ii. Stop bits: 0 or 1.
        iii. Databits: 7 or 8.
        iv. For the US and Canada scales are typically configured for 7 data bits, Even parity and 1 stop bit, <u>but this depends</u> upon the POS system's configuration.
        v. For Europe the Ariva scales are typically configured for 7 data bits, Odd parity and 1 stop bit, <u>but this depends</u> upon the POS system's configuration.

    e. The *jpos.xml* file entry "<prop name="metricUnit" value="false"/>" also needs to be set to "true" or "false".

i. If set to "false" the MeasuredWeight field will display weight in Lbs. or Oz.
   1. This is typically true for the US.
ii. If set to "true" the MeasuredWeight field will display the weight in grams.
   1. This is typically true for the EU.

f. The *jpos.xml* file entry "maximumWeight" also needs to be set as follows (based on the maximum capacity of the scale being used (see the scales' Data Label)):
   i. 0-15 lbs.:   15000
   ii. 0-6/6-15 lbs.:   15000
   iii. 240 Oz.   240000
   iv. 0-3/3-6 kg: 6000
   v. 0-15 kg: 15000
   vi. 0-6/6-15kg: 15000
   vii. 0-30 lbs.   30000
   viii. 0-15/15-30 lbs. 30000

g. The <u>scale</u> RS-232 settings must match the MTScale-JPOS RS-232 settings.
   i. The Ariva RS-232 settings can be configured via the Ariva display menu.
   ii. The Viva RS-232 settings can be configured via the Viva display menu.
   iii. See the appropriate User Manuals to set these values.

h. Save the *C:\Mettler Toledo\MT JavaPOS App\jpos.xml* file when done editing.

Running the Test Application:

1. Double-click on the *C:\Mettler Toledo\MT JavaPOS App\startMTScaleTestApptest.bat* file to start the application.
   a. Choose "*Select scale logical name*" based on the *jpos.xml* scale entry.
   b. Select the protocol to be used.
   c. "Open scale" and "Claim scale".
   d. "Get weight" to validate scale is properly connected.

Error Conditions:

1. When executing the "Claim scale" command in the Mettler Scale Test Application you get the following error:
   a. "java.lang.UnsatisfiedLinkError: no rxtxSerial in java.library.path thrown while leading gnu.io.RXTXCommDriver"
   b. The only known solution to this problem is to:
      i. Uninstall *MTScale-JPOS Released-YYYYMMDD.exe*
      ii. Uninstall Java
      iii. Re-install Java
      iv. Re-install *MTScale-JPOS Released-YYYYMMDD.exe*

2. Error: No weight data available
   a. Error message in log file:
      i. *Error code = JPOS_E_TIMEOUT*
      ii. *Reported extended error code = SCALE_NODATA*
      iii. *Error message: No weight data available*

b. Possible cause:
    i. Ariva menu settings 3.1 – 3.6 do not match *jpos.xml* configuration settings.
    ii. Make sure you edited the correct "*JposEntry logicalName=*" entry in the *jpos.xml* file.

<div align="center">

Debugging:
</div>

1. Turn on the log file as follows:
    a. Set the jpos.xml file entry "<prop name="tracing" value="true"/>".
    b. Set the jpos.xml file entry "<prop name="tracingLevel" value="DEBUG"/>".
    c. After running the test application, review the trace file for debugging information. Also send to Mettler Toledo for additional assistance.
    d. *Three trace file are used: tracingScale_8217, tracingScale_COM1 and tracingScale_PIPE.*
    e. The trace files are typically located here: *C:\Mettler Toledo\MT JavaPOS App*