**Introduction:**

Serial Port communication using java can be done using RXTX library. RXTX library is a native library provides serial and parallel communication for the Java Development Toolkit (JDK). RXTX is provided under gnu LGPL license. RXTX provides same support as javax.comm library.

**Installing RXTX in Windows 32Bit Machine:**

Identify your Java Runtime Environment's folder. For version 1.6.0, this usually is

c:\Program Files\Java\jre1.6.0\_01\

Copy the files from the downloaded RXTX binaries folder. To download binaries go here <http://rxtx.qbang.org/wiki/index.php/Download>

* Copy **rxtxParallel.dll** to **c:\Program Files\Java\jre1.6.0\_01\bin\**
* Copy **rxtxSerial.dll** to **c:\Program Files\Java\jre1.6.0\_01\bin\**
* Copy **RXTXcomm.jar** to **c:\Program Files\Java\jre1.6.0\_01\lib\ext\**

**Installing RXTX in Windows 64Bit Machine:**

Do the same as for 32 bit except download the binaries from here <http://www.cloudhopper.com/opensource/rxtx/>

**Using RXTX in Eclipse**

Usually RXTX works but for eclipse sometimes it won’t work. You can use below way to configure the eclipse environment.

**Way-I:**

* Copy **RXTXcomm.jar, rxtxSerial.dll and rxtxParallel.dll** files to the lib directory of your project
* Under Project | Properties | Java Build Path | Libraries
* Click Add JARs... Button
* Select the RXTXComm.jar from lib directory
* Jar should now be in the Build Path
* expand the RXTXComm.jar entry in the list and select "Native Library Location"
* Select the project lib directory and apply

**Be careful when using System.in.read() and rxtx in win32; It can trip across a known JRE deadlock bug**

**Alternative way:**

The above setup didn't quite work for me, so here is an alternative.

* Copy RXTXcomm.jar to the lib directory of your project
* Navigate your package explorer to the lib folder, right click on RXTXcomm.jar | Build Path | Add to build path
* Copy rxtxSerial.dll and rxtxParallel.dll files to the root directory of your project
* Under Run | Run configurations | Classpath tab | User entries | Advanced | Add folder, choose the root folder of your project

This should be enough just to run it under Eclipse, when deploying a runnable jar, just make sure the dlls are on the same folder as the jar (JVM assumes it for classpath).

**For installing RXTX in Other OS:**

Refer this link <http://rxtx.qbang.org/wiki/index.php/Installation>.

**Usage:**

import gnu.io.\*;

The above header file is equivalent to javax.comm and provides all classes and methods provided by it.

**Sample:**

Follow below link for samples given by rxtx.

<http://rxtx.qbang.org/wiki/index.php/Examples>