

# JAVA: Serial Port access with javax.comm or rxtx on Linux etc.

If you want to access the serial (RS232) or parallel port with JAVA, you need to install a platform/operating system dependent library. Install either javax.comm from SUN (no windows version as of javax.comm version 3.0) or better install the rxtxSerial and/or rxtxParallel library from rxtx.org (Windows, Linux, Mac OS X).

## ***First install the library:***

Installation of rxtxSerial (from [www.rxtx.org](http://www.rxtx.org)) on Linux  
copy libRXTXSerial.so to /usr/lib  
copy RXTXcomm.jar to [JDK-directory]/jre/lib/ext/

## Error messages and solutions

Exception in thread "main" java.lang.NoClassDefFoundError: nulltest

This can mean that your CLASSPATH is not set to the current directory. Set the CLASSPATH also to the current directory with (on Windows):

set classpath=.;%classpath%;

or try this to run "nulltest":

java -cp . nulltest

\$ java -Djava.library.path=/usr/lib nulltest

Exception in thread "main" java.lang.UnsupportedClassVersionError:

Bad version number in .class file

This usually means that your application has been compiled with a newer version of JDK than the version you try to run it with. For example, the source code is compiled with JDK 1.4 but executed with JRE 1.3. JRE 1.3 does not understand the new format of .class files generated by compiler from JDK 1.4 so you get the error message.

\$ /usr/jdk1.6.0/bin/java nulltest

Error loading LinuxSerialParallel: java.lang.UnsatisfiedLinkError:

no LinuxSerialParallel in java.library.path

Exception in thread "main" java.lang.UnsatisfiedLinkError:

com.sun.comm.Unix.isDevLink(Ljava/lang/String;)Z

at com.sun.comm.Unix.isDevLink(Native Method)

at com.sun.comm.PathBundle.add(PathBundle.java:108)

at com.sun.comm.PlatformPortBundle.<init>(PlatformPortBundle.java:44)

at javax.comm.CommPortIdentifier.<clinit>(CommPortIdentifier.java:138)

Make sure that libLinuxSerialParallel.so is in /usr/lib/ and can be read by the user your running the java application

java -Djava.library.path=/usr/lib nulltest

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

thrown while loading gnu.io.RXTXCommDriver

Exception in thread "main" java.lang.UnsatisfiedLinkError: no rxtxSerial in java.library.path

at java.lang.ClassLoader.loadLibrary(ClassLoader.java:1682)

at java.lang.Runtime.loadLibrary0(Runtime.java:823)

at java.lang.System.loadLibrary(System.java:1030)

at gnu.io.CommPortIdentifier.(CommPortIdentifier.java:83)

Make sure the rxtx library is installed as shown above.