**JConsole**

JConsole is a JMX-compliant monitoring tool. It uses the extensive JMX instrumentation of the Java virtual machine to provide information on performance and resource consumption of applications running on the Java platform

**Setting up JConsole to monitor a Java application**

1. The Java application that you want to monitor must be started with command-line options that make it accessible to JConsole from other systems or other users. JConsole can attach to processes owned by the same user on the same system without these options. The simplest set of options for monitoring are shown in the following example:
2. -Dcom.sun.management.jmxremote.port=<port number>
3. -Dcom.sun.management.jmxremote.authenticate=false

-Dcom.sun.management.jmxremote.ssl=false

The value for *<port number>* must be a free port on your system. In this example, the authenticate and ssl options prevent password authentication and encryption by using Secure Sockets Layer (SSL). Using these options allows JConsole, or any other JMX agent, to connect to your Java application if it has access to the specified port. Use these non-secure options only in a development or testing environment. For more information about configuring security options, see <http://docs.oracle.com/javase/8/docs/technotes/guides/jmx/overview/connectors.html>.

1. Start JConsole by typing **jconsole** on the command line. Your path must contain the bin directory of the SDK.
2. The JConsole **New Connection** dialog opens: Enter the host name and port number that you specified in step [1](https://www.ibm.com/support/knowledgecenter/SSYKE2_8.0.0/com.ibm.java.lnx.80.doc/diag/tools/JConsole.html?view=kc#jconsole__step1). If you are running JConsole on the same workstation as your Java application, leave the host name value as localhost. For a remote system, set the host field value to the host name or IP address of the workstation. Leave the **Username** and **Password** fields blank if you used the options specified in step [1](https://www.ibm.com/support/knowledgecenter/SSYKE2_8.0.0/com.ibm.java.lnx.80.doc/diag/tools/JConsole.html?view=kc#jconsole__step1).
3. Click **connect**. JConsole starts and displays the summary tab.