Java Properties in CAPS 5.1
Using Properties for Runtime Control, Note 2

Add a custom property to system properties

Introduction

Java CAPS 5.1 developer may need to determine a runtime value of one or more system properties to, perhaps, use its vale for runtime flow control. This is the next in a series of notes on the use of Java Properties for controlling runtime behaviour of Java CAPS solutions.

This note walks through an example of configuring Java CAPS 5.1 through adding a custom property to system properties. Java collaboration developed in Note 1 is used to retrieve the value of the new property.

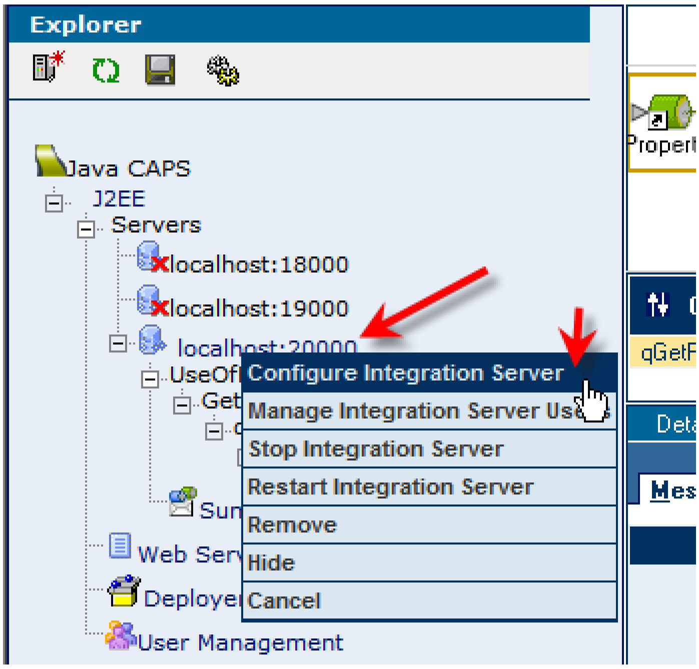
Add Custom Property to System Properties

A custom property can be added to the set of system properties by listing it on the JVM bootstrap command line. How to add a property to the JVM bootstrap command line varies between application servers.

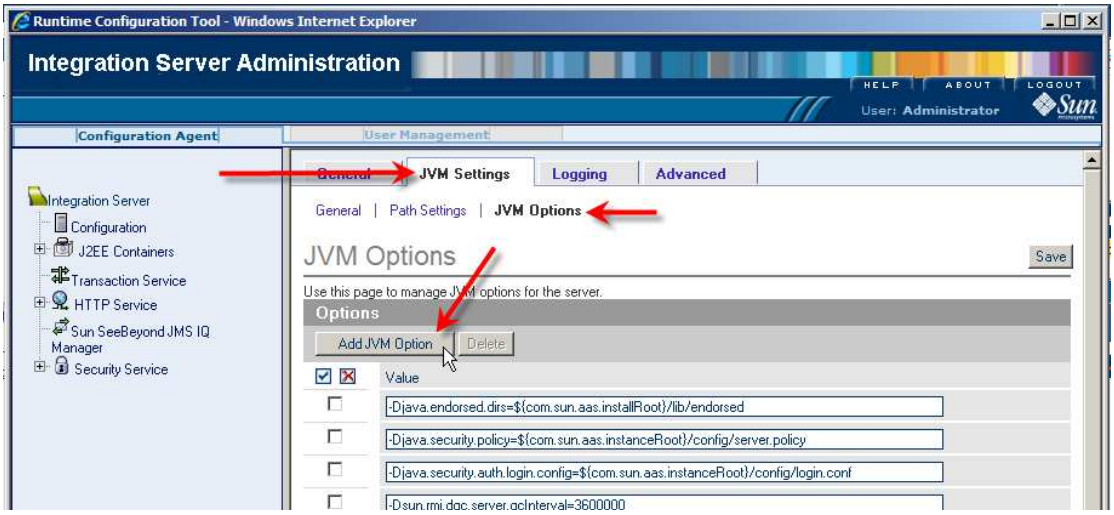
This note applies to the Sun SeeBeyond Integration Server, provided as part of the Java CAPS 5.1 distribution.

There are a number of ways to add a custom property to the JVM bootstrap command line, the easiest, perhaps, is through the Enterprise Manager.

Start the Enterprise Manager and expand the logical host to whose IS's JVM to add the property. Right-click on the name of the logical host and choose Configure Integration Server.



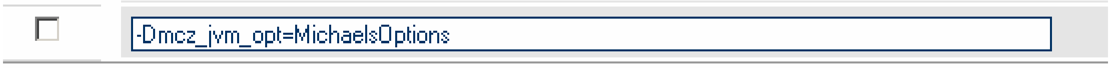
In the Integration Server Administration window select the “JVM Settings” tab, “JVM Options” subtab and click the “Add JVM Option button”.



Use this page to manage JVM options for the server.

	Value
☐	-Djava.endorsed.dirs=${com.sun.aas.installRoot}/lib/endorsed
☐	-Djava.security.policy=${com.sun.aas.instanceRoot}/config/server.policy
☐	-Djava.security.auth.login.config=${com.sun.aas.instanceRoot}/config/login.conf
☐	-Dsun.rmi.dgc.server.gcInterval=3600000

Enter the property name and value using the configuration directive convention -Dname=value, for example:



☐ -Dmcz_jvm_opt=MichaelsOptions

or –Dmcz_jvm_opt=MichaelsOption

Adding the property this way will require the Integration Server to be re-started.

Access custom system property

Use the project developed in Note 1 to obtain all system properties, the new property mcz_jvm_opt amongst them. Clearly, asking for this property by name, in the same manner as java.class.path or sun.boot.class.path, will get the value of the new property.

```
-- listing properties --
java.vendor=Sun Microsystems Inc.
com.sun.aas.imqBin=C:\jcaps513\logicalhost\is\imq\bin
javax.xml.soap.SOAPFactory=com.sun.xml.messaging.saaj.soap.ver1_...
.
.
.
os.name=Windows XP
sun.boot.class.path=C:/jcaps513/logicalhost/is/lib/endors...
mcz_jvm_opt=MichaelsOptions
com.sun.CORBA.ssl.server.required=false
.
.
.
javax.net.ssl.trustStore=C:/JCAPS513/logicalhost/is/domains/pr...
javax.xml.transform.TransformerFactory=com.sun.org.apache.xalan.inter
nal.xsl...
```

Characteristics of this method

It is easy to add a property this way.
The property is global.
The property value cannot be set/changed without restarting the IS
There may be a limit to how many name/value pairs one can reasonably add to the JVM bootstrap command.

Closing

One can add custom Java properties to the collection of system properties, to be used for dynamic runtime control of Java CAPS solutions, by adding them to the JVM bootstrap command line.