JMX Monitoring

NetBeans JMX Module Allows You To

- Develop management applications
- Add management to existing applications
- Develop manager applications
- Monitor the state of the Virtual Machine

NetBeans JMX Module Features

- Wizards to help you develop JMX MBeans, Agents, and Managers
- A set of actions to update existing MBeans (add attributes, operations, implement the MBeanRegistration interface, etc.)
- MBean generation from an existing Java Class.
- An action to register MBeans and Java objects in a JMX Agent
- Generation of JUnit tests that are ready to test (new or existing) MBean attributes and operations

NetBeans JMX Module Features

- The ability to launch the JDK 1.5 management console (JConsole)
- Integration with Java project. You can Run and Debug your application using JConsole
- A sample application based on the Anagram game that shows you how to add JMX power to your application
- A wizard to generate a JDK 1.5 management properties file, that allows you to launch a secure manageable JVM
- Online help system

Players in JMX Environment

- JMX Agent
  - > Any application that registers MBeans with an MBeanServer.
- JMX MBean
  - > Represents a device, an application, or any resource that needs to be managed
  - > Exposes a management interface: a set of readable and/or writable attributes and a set of invokable operations, along with a self-description
  - > Emits notifications when certain defined events occur
- JMX Manager
  - > Any application that connects to a remote JMX Agent.

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Lab1: Monitor a Method

- Accessing the Wizards
- Launching JConsole from NetBeans
- Monitoring existing application that is JMX monitoring built into it

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Lab2: Add JMX Instrumentation to a Java Application

- Creating the Sample Anagram Project
- Creating the Anagram JMX Standard MBean
- Updating the AnagramsStats MBean
- Implementing the AnagramsStats MBean
- Generating a JUnit test for AnagramsStats MBean
- Adding Logic to the JUnit AnagramsStatsTest class
- Generating a JMX Agent
- Adding the AnagramsStats MBean to the Agent
- Connecting the management and the application together
- Running the Anagram Game with JConsole

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Resources
http://www.javapassion.com/
netbeans/masterindex.html#
JMX