OGSiJMXConsole

Google Summer of Code Proposal - Use JMX to manage OSGi based Cocoon blocks

from http://wiki.apache.org/general/SummerOfCode2006

by PhilippSchmidt

Author

I'm student in my final year of Medien-Informatik at the University of Applied Science of Giessen-Friedberg, Germany and a Cocoon user since version 1.7. I would like to realize this project because it combines two very interesting technologies OGSi for complex component depedencies and JMX for remote interaction and instrumentation.

Benefits for the Community

The goal is to make the management of Cocoon based applications easier and provide a single interface for management and logging. With OGSi as the plattform for the next generation of Cocoon, every feature will be realized as a block (read OGSi bundle). The Integration of JMX would allow remote managmenant of the OGSi shell and logging at runtime. The JMX functionality will be realised as an an optional Cocoon Block and could be disabled, the perfomance impact should be minimal since normal calls don't go trough JMX.

Design / Approach=

JMX will be bundled as a Cocoon Block (read OGSi bundle). This bundle contains an JMX MBeanServer with the DynamicBeans that represent the different OGSi Services. An external JMX Console would request this service to get all the registered MBeans.

For JMX functionality MX4J (http://mx4j.sf.net) will be used. For the implementation of the JMX Management Console MC4J would be an option (http://mc4j.sf.net) since it has a rich feature set and an Apache 2.0 License.

Deliverables

- An Cocoon JMX Block as described to access OGSi.
- JMX Console Implementation
- Documentation of usage in the Cocoon Zone (Daisy).

Timeline

The shedule of the project will look like this:

May 23 - May 31	Evalutation
June 1 - July 20	Design & Code
July 20 - August 1	Testing
August 1 - August 7	Documentation
August 7 - August 20	Time Buffer