Bench4Q

Bench4Q-rm

2010 OW2 Programming Contest

2010-8-26

Introduction

Bench4Q-rm is the name of our software for 2010 OW2 Programming Contest. It covers the following contest topic:

38. Implement server-side resource monitor in Bench4Q

39. Implement on-line book store in Bench4Q by Servlet/EJB3

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SVN Repository:

The SVN repository of Bench4Q-rm is http://code.trustie.net/repos/bench4Q-rm. It has the following subdirectories:

Subdirectory	Description
ClusterMon/	The source code of ClusterMon. An Eclipse JAVA project.
ServerMon/	The source code of ServerMon. An Eclipse JAVA project.
accessories/	
ServerMonitorLinux/	The source code of ServerMonitorLinux, which is compiled into libServerDataProvider.so and is used by ServerMon and ClusterMon. An Eclipse C++ Shared Library project.
ServerMonitorMFC/	The source code of ServerMonitorWindows, which is compiled into ServerDataProvider.dll and is used by ServerMon and ClusterMon. A Visual C++ 6.0 MFC DLL project.
branches/	Empty.
doc/	The documents.

tags/	Empty.
trunk/	
Bench4Q_SUT_1.0_EAR/	The EAR of Servlet/EJB3-based SUT. A MyEclipse EAR project, which including two projects under Bench4Q_SUT_1.0_EJB3/ and bench4q-rm-sut/.
Bench4Q_SUT_1.0_EJB3/	The EJB3 part of Servlet/EJB3-based SUT. A MyEclipse EJB project.
bench4q-rm/	The client of Bench4Q-rm. An Eclipse JAVA project.
bench4q-rm-sut/	The web application part of Servlet/EJB3-based SUT. A MyEclipse Web project.

Added and Changed Code Compared with Bench4Q

All the code under the following directories is written for this contest:

> ClusterMon/
> ServerMon/
> ServerMonitorLinux/
> ServerMonitorMFC/
> Bench4Q_SUT_1.0_EAR/
> Bench4Q_SUT_1.0_EJB3/

Code under bench4q-rm/ is largely borrowed from the original Bench4Q code, with the following additions and changes:

Additions:

> org.bench4Q.console.rm.*
> org.bench4Q.console.ui.controlTree.DatabaseNode.java
> org.bench4Q.console.ui.controlTree.DatabasePCNode.java
> org.bench4Q.console.ui.controlTree.ServerNode.java
> org.bench4Q.console.ui.controlTree.ServerPCNode.java
> org.bench4Q.console.ui.controlTree.section.M_ServerPanel.java
> org.bench4Q.console.ui.controlTree.section.M_ServerPCPanel.java
> org.bench4Q.console.ui.controlTree.section.P_CPURATIOSection.java
> org.bench4Q.console.ui.controlTree.section.P_DISKREADSection.java
> org.bench4Q.console.ui.controlTree.section.P_DISKWRITESection.java
> org.bench4Q.console.ui.controlTree.section.P_MEMUSAGESection.java
> org.bench4Q.console.ui.controlTree.section.P_NETWORKRECVSection.java
> org.bench4Q.console.ui.controlTree.section.P_NETWORKSENTSection.java

Changes:

> org.bench4Q.console.model.ConfigModel.java
> org.bench4Q.console.ui.ConsoleUI.java
> org.bench4Q.console.ui.controlTree.Bench4QTreeMode.java
> org.bench4Q.console.ui.controlTree.section.M_loadSimulatorPanel.java

org.bench4Q.console.ui.controlTree.section.M_RequestPanel.java

Code under bench4q-rm-sut/ is largely borrowed from the orginal Bench4Q code, with the following additions and changes:

Additions:

org.bench4Q.servlet.IBench4QDao.java

org.bench4Q.servlet.EJBDao.java

org.bench4Q.servlet.JdbcDao.java

org.bench4Q.servlet.db_access_approach_servlet.java

org.bench4Q.servlet.ClusterHelper.java

Changes:

org.bench4Q.servlet.Database.java

Testing Code

ServerMon project:

Class	Function
org.bench4Q.servermonitor.test.JNITest	Test the native code used in ServerMon.
org.bench4Q.servermonitor.test.RMITest	Test the RMI service of ServerMon.

ClusterMon project:

Class	Function
org.bench4Q.servermonitor.test.JNITest	Test the native code used in ClusterMon.
org.bench4Q.servermonitor.test.RMITest	Test the RMI service of ClusterMon.

ServerMonitorMFC project:

There is a sub project named TestServerMonitor to test the compiled dll file.