

14.5.4 IBM Monitoring and Diagnostic tools for Java

IBM Monitoring and Diagnostic tools for Java are available using IBM Support Assistant, which is a workbench that offers a single point to access these tools. Using IBM Monitoring and Diagnostic tools for Java, you can analyze applications, garbage collection files, Java heap dump files, and Java core files.

For additional information about IBM Monitoring and Diagnostic tools for Java, refer to the following website:

<http://www.ibm.com/developerworks/java/jdk/tools/>

The following sections describes the components of the IBM Monitoring and Diagnostic tools for Java.

Health center

3

Health center allows you to monitor the real-time running applications and provides useful information about memory, class loading, I/Os, object allocations, and the system. This tool can help you to identify application memory leaks, I/O bottlenecks, and lock contentions and can help you to tune the garbage collector. The health center is designed to minimize the performance impact of the monitoring.

Memory analyzer

This tool analyzes the Java heap of a JVM process, identifies potential memory leaks, and provides the application memory footprint. Memory analyzer provides a useful object tree browsing function to focus on the objects' interactions and to analyze the memory usage.

Dump analyzer

This tool determines the causes of Java crashes by analyzing the operating system dump. This analysis can be useful to better understand the application failures.

Garbage collection and memory visualizer

This tool helps you analyze and tune the garbage collection, similar to PMAT. It also provides recommendations to optimize the garbage collector and to find the best Java heap settings. Garbage collection and memory visualizer allow you to browse the garbage collection cycles and to better understand the memory behavior of the application.

14.5.5 IBM HTTP server status monitoring page

To monitor IBM HTTP Server, a useful web page called server-status is available. This page is disabled by default, but you can enable it in the httpd.conf configuration file. This web page displays a real-time view of the current IBM HTTP Server state, which includes the following information:

- ▶ The CPU usage
- ▶ The total number of requests served since the server is up
- ▶ The total traffic size since the server is up
- ▶ Some average about the response time
- ▶ The number of requests currently running
- ▶ The number of idle threads
- ▶ And the list of the requests being processed