



BEA JRockit® Mission Control™

Monitoring System Runtime

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Introduction to Runtime Monitoring

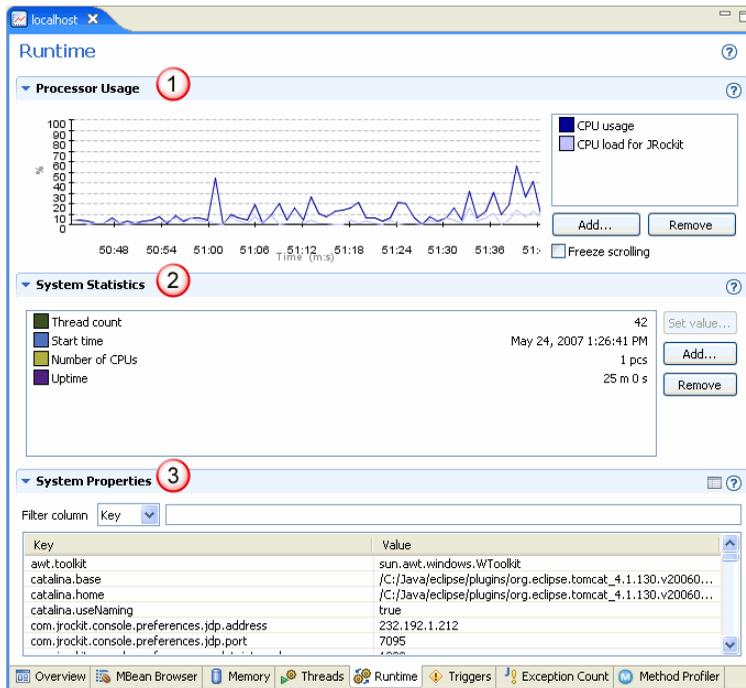
Careful monitoring of system runtime allows you to evaluate how your application is performing while it *is* performing. The **Runtime** tab in Oracle JRockit Mission Control's Management Console provides a low-overhead, non-intrusive interface for monitoring system performance and indicating where that performance might be exhibiting detrimental behavior. This section describes the **Runtime** tab. It includes these topics:

- [Getting Familiar with the Runtime Tab](#)
- [Processor Usage Graph](#)
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Getting Familiar with the Runtime Tab

The **Runtime** tab ([Figure 1-1](#)) is used for monitoring system performance during runtime. This tab provides such information as the average processor load over time and as a percentages of the overall load, the number of Java processes currently running, and the percentage of overall processor load. It also lists all system properties loaded with the application.

Figure 1-1 The Runtime Tab



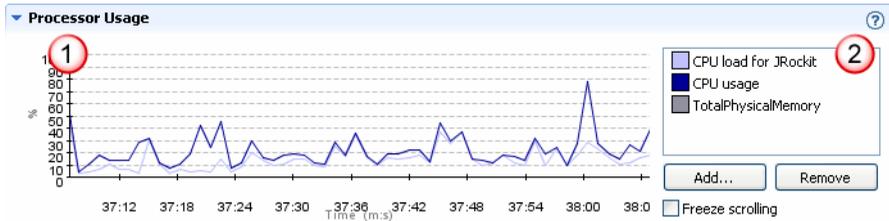
The **Runtime** tab is divided into the following sections:

1. **Processor Usage graph**—contains a graphical view of the Processor attributes.
2. **System Statistics panel**—contains the actual data of the attributes shown.
3. **System Properties**—contains the System Properties table.

Processor Usage Graph

The **Processor Usage** graph (Figure 1-2) shows real-time information about the CPU, such as percentage of CPU used, over time, and percentage of JVM-generated CPU load, also over time. You can add additional processor usage information by using the procedures described in these topics:

Figure 1-2 Processor Usage graph



By default, upon Management Console startup, the **Processor Usage** graph (marked 1 in [Figure 1-2](#)) shows the attributes CPU load for the JRockit JVM, CPU usage, and Total physical memory. The attributes are displayed over time. The attributes are identified in the legend to the right of the graph (marked 2 in [Figure 1-2](#)).

Please refer to [Runtime Tab Functionality](#) for a description of the functions you can use with this graph.

System Statistics Panel

The **System Statistics** panel ([Figure 1-3](#)) contains the exact numeric value of the attributes that are displayed.

Figure 1-3 Processor Usage panel



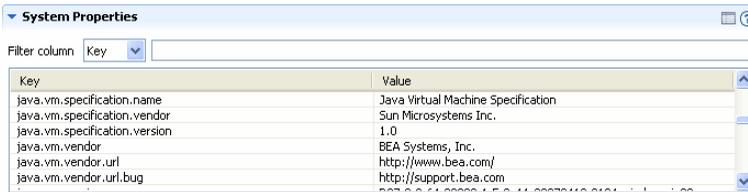
The default content of the System Statistics panel is the following:

- **Thread count**—the number of threads that are running.
- **Start time**—the exact time and date when the JRockit JVM started.
- **Number of CPUs**—the number of CPUs on the hardware that the JRockit JVM is using.
- **Uptime**—the time that the JRockit JVM has been running.

System Properties Table

The **System Properties** table (Figure 1-4) contains a list of all system properties invoked with the running application. This is a view-only panel.

Figure 1-4 System Properties table



Key	Value
java.vm.specification.name	Java Virtual Machine Specification
java.vm.specification.vendor	Sun Microsystems Inc.
java.vm.specification.version	1.0
java.vm.vendor	BEA Systems, Inc.
java.vm.vendor.url	http://www.bea.com/
java.vm.vendor.url.bug	http://support.bea.com

Runtime Tab Functionality

You can add and remove attributes from the Processor Usage graph. Use the procedures described in *Using the Management Console*.

You can also set values on the **Processor Usage** panel. For example, in the example shown in Figure 1-5, note that **NurserySize** is rendered in bold. This indicates that you can set the value for this attribute. You cannot set a value for an attribute rendered in a non-bold type.

To set a value for processor usage statistics

1. Highlight a processor attribute that allows you to set its value (that is, an attribute rendered in bold, Figure 1-5).

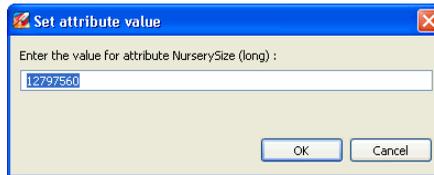
Figure 1-5 Processor usage attribute selected for setting value



Attribute	Value	Action
CPU load for JRockit	0.1449238261819338 %	Set value...
NurserySize	14254336	Add...
CPU usage	0.2898732517085244 %	
TotalPhysicalMemory	1073070080	Remove

2. Click **Set value**.

The **Set attribute value** dialog box appears (Figure 1-6). Note that the labels in the box are determined by the attribute you select

Figure 1-6 Set attribute value dialog box

3. Enter the value you want to use and click **OK**.

The Oracle JRockit Mission Control Client sets the value of the attribute and that way it affects the values returned by the attribute.

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