

Java VisualVM

Java VisualVM is a tool that provides a visual interface for viewing detailed information about Java applications while they are running on a Java Virtual Machine (JVM), and for troubleshooting and profiling these applications. Various optional tools, including Java VisualVM, are provided with Sun's distribution of the Java Development Kit (JDK) for retrieving different types of data about running JVM software instances. For example, most of the previously standalone tools JConsole, jstat, jinfo, jstack, and jmap are part of Java VisualVM. Java VisualVM federates these tools to obtain data from the JVM software, then re-organizes and presents the information graphically, to enable you to view different data about multiple Java applications uniformly, whether they are running locally or on remote machines. Furthermore, developers can extend Java VisualVM to add new functionality by creating and posting plug-ins to the tool's built-in update center.

Java VisualVM can be used by Java application developers to troubleshoot applications and to monitor and improve the applications' performance. Java VisualVM can allow developers to generate and analyse heap dumps, track down memory leaks, browse the platform's MBeans and perform operations on those MBeans, perform and monitor garbage collection, and perform lightweight memory and CPU profiling.

Java VisualVM was first bundled with the the Java platform, Standard Edition (Java SE) in JDK version 6, update 7.

Overview

- The following documents provide an introduction to Java VisualVM.
 - **[Introduction to Java VisualVM](#)**
 - [Using the Applications Window](#)
 - [Working with Local Applications](#)
 - [Viewing Application Overview](#)
 - [Monitoring an Application](#)
 - [Monitoring Application Threads](#)
 - [Profiling Applications](#)
 - [Connecting to JMX Agents Explicitly](#)
 - [Working with Remote Applications](#)
 - [Viewing Application Overview](#)
 - [Monitoring an Application](#)
 - [Monitoring Application Threads](#)
 - [Connecting to JMX Agents Explicitly](#)
 - [Working with CoreDumps](#)
 - [Working with Snapshots](#)
 - [Browsing a Heap Dump](#)
- The following pages provide information about optional plug-ins that are currently available for Java VisualVM. These plug-ins are evolving outside of the JDK platform's update cycle, so consequently these pages are hosted on Java.Net.
 - [Working with MBeans](#)
 - [JConsole Plug-In Wrapper Tab](#)

Tools

- [jvisualvm](#) - The manual page for Java VisualVM.

Tutorials and Programmer's Guides

- [Getting Started Extending Java VisualVM](#) - An introduction to the Java VisualVM APIs, providing details of how to write extensions for Java VisualVM to create customized monitoring, troubleshooting and profiling services for your applications. This document is hosted on Java.Net.
- [VisualVM API FAQs](#) - This page is hosted on Java.Net.

More Information

- [Java VisualVM Developers' Site](#)
- [Java SE Platform Monitoring and Management documentation](#)
- [Troubleshooting the Java SE Platform](#)