

# Monitoring using VisualVM

Monitor the health of your Joget system by using the VisualVM tool. VisualVM comes by default in JDK7 and newer.

## 1. Add the respective options into your Joget start up script

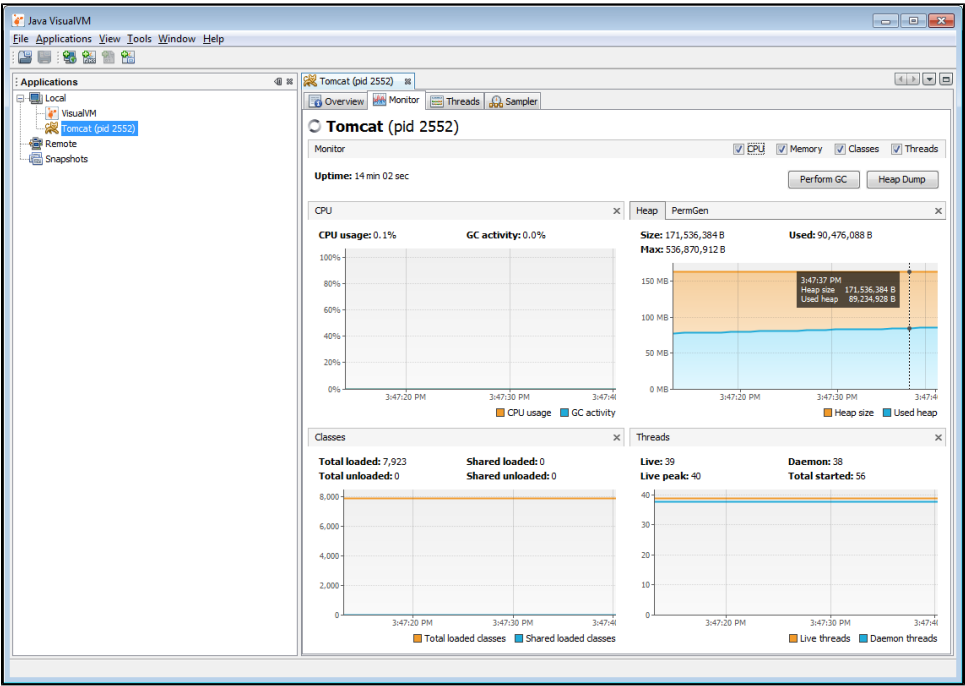
- 1. Edit joget-start.bat
- 2. Append the following into the "set JAVA\_OPTS=" line. Amend as needed.

```
-Dcom.sun.management.jmxremote=true -Dcom.sun.management.jmxremote.port=9090 -Dcom.sun.management.jmxremote.ssl=false -Dcom.sun.management.jmxremote.authenticate=false -Djava.rmi.server.hostname=127.0.0.1
```

- 3. Save and restart your server.

## 2. Starting up VisualVM

- 1. Locate your JDK's bin folder. (e.g. C:\Program Files\Java\jdk1.7.0\bin)
- 2. Locate **Visualvm.exe** and execute it.
- 3. Under the local tab, you should be able to find your Tomcat instance. Open it.



You are now able to monitor the real time performance and/or resources usage of your Joget system.

## Common terminology

Name	Description
Heap dump	A <b>heap dump</b> is a snapshot of memory at a given point in time. It contains information on the Java objects and classes in memory at the time the snapshot was taken. Source: <a href="https://www.rallydev.com/community/engineering/outofmemoryerror-fun-heap-dump-analysis">https://www.rallydev.com/community/engineering/outofmemoryerror-fun-heap-dump-analysis</a>
Thread dump	A <b>thread dump</b> is a list of all the Java <b>threads</b> that are currently active in a Java Virtual Machine (JVM). Source: <a href="https://www.rallydev.com/community/engineering/outofmemoryerror-fun-heap-dump-analysis">https://www.rallydev.com/community/engineering/outofmemoryerror-fun-heap-dump-analysis</a>