



Java applications are deployed with default or ad-hoc settings without proper testing and not suitable for production usage. Our service, ensures your applications have been properly configured and tuned.

## JVMTune J2EE APPLICATIONS

## TURBO CHARGE

JVMTune is a specialised performance analysis and observability service for Java based applications, focused to the Java Virtual Machine configuration: the heap memory usage, the garbage collection statistics and the overall system memory footprint. In general Java based applications are deployed with default or ad-hoc settings without proper testing and not suitable for production usage. It is important to analyse all these aspects to make sure your applications is good throughput and response time.

The heap memory configuration will be checked, including: Young, Old and Permanent generation sizes.

Java Virtual Machine is a very important system component for your Java based application. Improper memory settings can cause poor performance and affect overall availability of your application.

Each generation will be tuned based on the various synthetic load tests and we will ensure that the heap footprint is properly set and the application works properly without errors.

A garbage collector will be selected in order to minimise the number of collection activities and ensure the application has a good throughput. We will look for the following goals:

INCLUDES	
Heap Configuration	Analyse the heap memory configuration: Young, Old and Permanent generation sizes
Garbage Collector	A garbage collector will be selected to maximise performance and ensure availability
System footprint	The Java memory settings will be checked closely against the system overall memory
Final report	Includes all important tuning steps and their results followed by the final recommendation



- **throughput** the total time not spent in garbage collection
- **pause time** the time during the application is paused when the collection takes place
- frequency how often the collection occurs

To record memory and garbage collection statistics, we are using *jvmrec*, Kronometrix Data Recording

## **Requirements:**

- Oracle Java HotSpot, IBM J9
- · Linux, Solaris, Windows

## **Advantages**

Every time your application is changing, you should consider running JVMTune service, in order to ensure the throughput and response time are correct. System developers, devops and architects are directly interested to know how the Java based applications are functioning and performing over time. Avoid outages, maximise application performance with JVMTune