Parallelization of Annotated Java code in a Distributed Network

Abstract

Parallelism has been employed for many years, mainly in high-performance computing. The work focuses towards a new parallel execution technique in a distributed network in which the java code is parallelized and independent code is executed on different system in accordance with the availability of the system resource in a distributed network. It speeds up the execution of a particular application to a great extent. Dependencies among the code are detected. The proposed system can be used for parallel computation of the java program, which can be used in industry for executing large java codes. For execution of large java codes, time required will be large. The proposed system can harness the power of nearby all Java enabled machines. The aim is to turn a normal computer into a Super-Computer without extra hardware or space. It is designed for Parallel Computing using both wired & wireless network connections for achieving good speed of execution with the help of distributed network. The annotations are used in the code as indicators for parallel execution. Based on the annotations provided in the code it is parallelized by rebuilding the code for further execution in the network.
Parallelization of Annotated Java code in a Distributed Network

- Steve J. Chapin, Jon B. Weissman. Distributed and multiprocessor scheduling handbook

Index Terms

Computer Science
Distributed System
Keywords
Parallelism in Java  Annotations  High performance computing  load balancing  distributed networks.