Abstract

In this paper a statistical methodology for finding the optimal deployment of distributed software objects over computational nodes is presented. The optimal placement of a distributed software objects, from the performance viewpoint, has a significant impact on the performance of the software. In the proposed methodology, a performance predictor function is extracted...
from a dataset of simulation results using the regression analysis. This performance predictor function then is used by an optimization algorithm to find the optimal object deployment. The key advantage of the proposed methodology over using the traditional QN models is that solving the predictor model obtained from the QN approach during the optimization process many times, particularly when the search space is huge, is prohibiting due to its time complexity.

Reference

Performance engineering, USA

Index Terms
Computer Science

Software Engineering

Key words
Software Performance Engineering

optimal object deployment

simulation

Finite State Process