Abstract

Distributed computing systems are designed to solve computationally intensive problems with the help of convergence of computing resources scattered across the network. Distributed computing object middleware technologies have bring revolutionary concepts in the world of distributed computing and also made the building of distributed computing applications more efficient and nearer to real world. But the selection of most efficient distributed computing object middleware technology on the basis of different performance metrics is an important research issue. In this paper we are presenting the performance evaluation and comparison of distributed computing object middleware technologies which include Common Object Request Broker Architecture (CORBA), Internet Communication Engine (ICE), HORB, and TCP based Dot NET Remoting. Because these distributed computing object middleware technologies have not been evaluated and compared collectively on the basis of performance metrics which include overhead generation and round trip latency. The results that we have gathered showed that ICE is showing better performance in terms of overhead generation. And HORB has showed reduced round trip latency as compared to other middleware’s.
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Index Terms

Computer Science
Distributed Computing

Key words
Performance Evaluation
Distributed Computing Object Middleware technology

CORBA
HORB
ICE
Dot NET Remoting