Abstract

During the past years, distributed computing approach is most popular approach among the other computing approaches. In this approach, the execution time of the processes has been reduced and the setup cost of distributed systems is very low. The process is defined as subtasks, subroutines, macro's etc. In the present work, a static interconnection of the computer systems is defined and called as the static step topology. By the use of this topology, N numbers of hand-held devices and other computer systems may be attached. As the size of network increases, the space complexities are computed by varying the length of the cable segments. Node failures are also computed in the static step topology. A Unified Modeling Language (UML) is used to demonstrate the dynamic execution of process in step topology and represented through sequence diagram.

References


**Index Terms**

Computer Science  Distributed Computing

**Keywords**

Distributed approach  static step topology  space complexity  node failures and UML