Abstract

In the recent year, distributed computing systems have become very popular approach of computing in comparison of old centralized computing systems due to high performance computing in a very low cost. Topological design for static interconnection of computer systems under distributed environment plays a very vital role to achieve the desired accuracy in a low cost. For the topological design, the concept of graph theory is used by the various researchers from time to time. The present work is an attempt to propose a new octagonal topological design for static interconnection of computer systems under distributed environment. All interconnected nodes are placed at equidistant and Unified Modeling Language (UML) approach is used to model the proposed network topology. UML class and sequence diagrams are designed for effective execution of incoming process inside a Process Execution Controller (PEC).

References

- E. Levy, G Louchard and J. Petit, A Distributed Algorithm to Find Hamiltonian Cycles in G(n, p) Random Graphs, This research was partially supported by the EU within the 6th Framework Programme under contract 001907 (DELIS) and by the Spanish CICYT project TIC2002-04498-C05-03 (TRACER).

**Index Terms**

Computer Science
Information Systems

**Keywords**

Class Diagram
Distributed Computing
Octagonal Grid Topology and Sequence Diagram