

Paper: The Scalable Commutativity Rule: Designing Scalable Software for Multicore Processors

This paper is how to know the structure is scalable for multicore systems with high level interfaces. The main approach of this paper is whenever interface operations commute, they can be implemented in a way that scales. Also, this paper introduces CPMMUTER to help programmers analyze interface commutativity and test that an implementation scales in commutative situations. This paper provides a new approach for developers to understand and exploit multicore scalability starting at the software interfaces. By this paper, programmers can easily design scalable programs, that can effectively performs in multicore systems.