Checkpoint and Rollback-Recovery of Distributed Object-Oriented Systems¹⁾

Jerzy BRZEZIŃSKI, Anna KOBUSIŃSKA

Poznań University of Technology, Institute of Computing Science ul. Piotrowo 3a, 60-965 Poznań, Poland e-mail: Jerzy.Brzezinski@cs.put.poznan.pl, Anna.Kobusińska@cs.put.poznan.pl

Received December 10, 2003

Abstract. The rollback recovery problem has been widely studied for years in the context of process-based message passing systems, and lately the recovery of distributed object-oriented systems has also received significant attention. Therefore the goal of this paper is to present and analyse checkpoint and rollback-recovery algorithms, which exploit the structure of distributed objects. To achieve this goal, the research issues concerning rollback recovery in distributed object-oriented systems are highlighted, and solutions proposed so far are discussed.

Key words: fault-tolerance, rollback-recovery, distributed object-based systems

 $^{^{1)}}$ This work has been partially supported by the State Committee for Scientific Research grant no. 7T11C 036 21.