

CONTINUOUS MEDIA SUPPORT FOR MULTIMEDIA
DATABASES

by

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Abstract

Multimedia presentations demand specific support from database management systems. The delivery of continuous media data from a database server to multiple destinations over a network presents new challenges for buffer management in a DBMS. It has to consider specific requirements like providing for continuity of presentation or for immediate continuation of presentation after frequent user interactions. Different media also have specific features that must be considered.

In this thesis we present a buffer management strategy for MPEG video presentations. It supports smooth presentation of MPEG video stored in the relational DBMS DB2/UDB, and quick response to user interactions. Experiments show that our buffer management strategy provides support superior to other strategies presented in the literature. A framework to support complex multimedia presentation that is based on DB2/UDB and its multimedia extenders is also presented.

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