

Jankiewicz, K.

SXCCP+: simple XML concurrency control protocol for XML database systems. (English)

Zbl 1236.68059

Control Cybern. 38, No. 1, 215-237 (2009).

Summary: Increasing significance and popularity of XML is the main reason why many commercial object-relational database management systems (ORDBMSs) developed XML storage and processing functionality. Additionally, there are new types of specialized database systems known as 'native' XML database systems. As we know, concurrency control is one of the most important mechanisms in DBMSs. Unfortunately, concurrency control mechanisms, which have been used so far in commercially available native XML DBMSs, offer very low degree of concurrency. The development of universal and effective concurrency control protocol for accessing XML data, with high degree of concurrency, is a necessary condition of the native XML database growth.

The aim of this paper is to propose a new concurrency control protocol in XML document access. This protocol is based on primitive operations, which can be treated as a unification platform for any of the XML access methods.

MSC:

68P15 Database theory

Keywords:

concurrency control; XML; databases; protocols

Full Text: [Link](#) [EuDML](#)