

3-L model: a model for checking the integrity constraints of mobile databases

ABSTRACT

In this paper we propose a model for checking integrity constraints of mobile databases called Three-Level (3-L) model, wherein the process of constraint checking to maintain the consistent state of mobile databases is realized at three different levels. Sufficient and complete tests proposed in the previous works together with the idea of caching relevant data items for checking the integrity constraints are adopted. This has improved the checking mechanism by preventing delays during the process of checking constraints and performing the update. Also, the 3-L model reduces the amount of data accessed given that much of the tasks are performed at the mobile host, and hence speeds up the checking process.

Keyword: Mobile Databases, Integrity Constraints, Checking of Integrity Constraints