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多级安全DBMS的通用审计策略模型

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Abstract

This paper proposes a generic audit policy model on multilevel secure DBMS. The model is powerful expressively which not only expresses audit policy based on periodical time constraints, but also implements audit policy deduction based on rules. Furthermore, fine-grained audit policies are possible in this model with the introduction of object attribute predicate. The decidability of the model is proven and a decidability algorithm is presented.

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摘要

提出了一种基于多级安全数据库管理系统的通用审计策略模型.该模型具有丰富的表达能力,既可以表达基于时间的审计策略,也可以实现基于规则的审计策略推衍.通过引入对象的属性谓词,还可以表达细粒度的审计策略.证明了该模型的可判定性,并给出了判定任意一个事件是否需要审计的算法.

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