Trusted-based scalable access control model for broadcast XML documents.

ABSTRACT

XML language is becoming a de facto standard for representing and transmitting data on the web so controlling access to XML documents is an important issue. Several XML access control approaches have been proposed to control the access of the published XML documents but these approaches still cannot scale well with increased system and management workload because they specify and enforce their access control policies in centralized servers. We have proposed a distributed XML access control model for that improves the scalability by distributing the system and management workloads into several servers and different administrator, respectively. In this paper, the scalability of the proposed model is evaluated using a quantitative approach that shows that the proposed model is cost-effectively scalable with an increase in system and management workloads.

Keyword: Distributed access control; XML document; Scalability; Push-based access.