On Inference-Proof View Processing of XML Documents

Objective:

we focus on inference problems in XML documents with incomplete information. That are implement two methods first one separate for all documents and second we send particular data in any organization.

Domain:

Ontology

Abstract:

In This paper we implement investigates methods to automatically infer structural information from large XML documents. The Access control for XML documents is a non trivial topics as can be witness from the number of approaches presented in the literature. We Trying to compared these, we discovered the need for a simple, clear and explicit language to state the declarative semantics of an access control policy. In this method we introduce two methods first the xml documents are stored in any organization, that particular data are not stored in one file they separate each content in particular data and second we implement security purpose, in any organization need that file ,on this time we provide only fake date, not give original data. We present in this method for generate an inference-proof view by weakening the actual XML document, eliminating confidential information and other information that could be used to infer confidential information. To avoid inferences based on the schema of the XML documents, the actual XML document is modified according to the weak operations as well, such that the modified document types conforms with the generated inference-proof view. In this project we introduce variables into the inference capabilities to increase their expressiveness and analyze the high complication of the algorithm because of the variables. we discuss and use experiments to show in which situation the complexity of the algorithm would be decrease.
Existing System:

- In these applications, the owner of a data source needs to publish data to others such as public users on the Web or collaborative peers. Often the data owner may have sensitive information that needs to be protected. As illustrated by the following ex: if we publish data carelessly, users can use common knowledge to infer more information from the published data, causing leakage of sensitive information. The semi-structured nature of XML documents unlike hierarchies or relational tables where the structure is known ahead of time, XML documents do not necessarily have a schema. The dependence of a node to its ancestors unlike relational tables that usually exist as stand-alone entities, an XML node lives with respect to its ancestors, and its children are dependent on the node itself.

Limitation:

- In order to protect data in XML documents, traditional access control policies, like DAC and MAC, are enforced on these documents.
- The differential privacy approach is relevant only when exposing statistical information rather than individual records. However, in most cases, performing different tasks require exposing the individual records.
- The smallest piece of data protected by these access control policies is an XML node.

Proposed System:

- We propose a formal notion of an inference-proof view of an XML document, to meet the requirements of our goal of effective inference control under the inference capabilities of a client. We present an algorithm for generating an inference proof view and a corresponding modified schema. The inputs include an XML document and its schema, potential secrets, and the inference capabilities of a (group of) client(s). We introduce variables into the inference capabilities to increase their expressiveness and analyze the high complexity of the algorithm because of the variables. Then, we discuss and use experiments to show in which situation the complexity of the algorithm would be decreased. This concept focuses on assigning a score that represents the sensitivity level of the data exposed to the user and by that predicts the ability of the user to maliciously exploit this data.
Advantages:

- we have developed a practical MAC model for XML databases for different purposes, including multilevel secure XML database systems.
- we plan to extend out model to resolve the polyinstantiation problem for modification operations.
- XML document containing some pieces of confidential information, an alternative XML document not containing any confidential information, and not violating any integrity constraint or semantic constraint known by the client can be constructed effectively.

Block diagram:
System Requirements:

Software Requirements:

Language : JAVA, JavaScript
Framework : MVC 2
Front End : JSP, Servlet
Back End : My SQL

Hardware Requirements:

Processor : >2 GHz
Hard disc : 80 GB
RAM : 1GB