

Temporal, delegable and cheap update access control to published XML documents.

ABSTRACT

Providing access control for published XML documents on the Web is an important topic. It involves the use of cryptographic techniques, addressing different requirements and, as a result, facing several challenges. Existing solutions still have some weaknesses such as system update cost, number of required secret encryption/decryption keys, size of encrypted document and supporting temporal and delegable access. This study propose a push--based access control policy enforcement mechanism for addressing these issues using a Dynamic Key Management Table (DKMT) and based on Identity Based Encryption (IBE). The proposed mechanism addresses the existing challenges and provides a more acceptable solution.

Keyword: XML documents; XML access control; Access delegation and temporal access.