Abstract

Really Simple Syndication (RSS) is a content-syndicated system that facilitates people to get the latest update automatically from a site without directly visiting it. RSS allows us to subscribe to a site which provides a feed, commonly a site or blog that is updating or adding its contents regularly.

The existing RSS system is publicly accessed by people, so anyone could see the RSS information freely. This is not a big deal for a site or blog which its contents are freely accessed. However, it will become a problem in distributing private information since the information can only be shared among its members.

To overcome the problem, we proposed a method to distinguish the information access based on users' privilege by encrypting the <link> element of the distributed RSS feed. The encryption is applied using XXTEA algorithm. Using this method, the proposed RSS system could protect information from unauthorized user. This system has a relatively good performance and level of security. Those are observed from the execution time, memory allocation, avalanche effect values, and the resistance of system to differential cryptanalysis.

***Keywords**: RSS, users' privilege, encryption, XXTEA, performance, security*