Signcryption - Unsigncryption Based Data Confidentiality for Tightening the Data Access Control Security in Named Data Network

R. Buvanesvari, K. Suresh Joseph, S. Santhosh

PKIET, Karaikal, Puducherry, Pondicherry University, Puducherry

ABSTRACT

Named Data Network is one of the networks where it is also called as Information centric network (ICN). The main objective of this paper is to provide a security for NDN network in terms of Data Confidentiality. While thinking about the NDN, data storing and access control is one of the major challenges lying ahead. This paper provides a Signcryption methodology for attain data confidentiality through tightened authentication simultaneously across NDN. The Signcryption and UnSigncryption (SUS) algorithm involves key-generation, signcryption and unsigncryption for tightening the confidentiality while data storing and access in NDN. The proposed Signcryption-unsigncryption algorithm is implemented in C++ programming language and the efficiency is verified. From the experimental results, it is verified that the proposed method outperforms than the existing approaches.

