Abstract

The formal modeling of CPT(Confidentiality, Privacy and Trust) properties to minimize data leaking threats from unauthorized access of data or use of data for other purpose. In this work we describe how to make data DIS (Data Integrating System) secure from all external threats and unauthorized access to make minimize data leakage threat during the early phase of development. We will model CPT Properties (Confidentiality, Privacy and Trust) in LTL (Linear Temporal Logic), use these LTL Properties presentation in Process Meta Language (PROMELA) and tested in SIMPLE Promela Interpreter (SPIN) a model Checker to verify the correctness and consistency of Data Integration Systems CPT security policies. This verified the correctness and consistency of the model. Results are encouraging and positive, if we adopt this approach we can make our data secure and mitigate the security threats which we have to face during the integration process of heterogeneous data sources.