

Abstrack

The development of technological security rapidly increase lately. One is the development of the security of the defense by using IDS or Intrusion Detection System. Development of IDS is still systemic, which means only from the system, while in terms of formal or formal definition of the language is still rare. The final asignment is to modeling IDS in the formal language of ontology languages. The part that is modeled is the IDS rule as part of the IDS itself to detect a DDoS attack. Ontology language that is used is a formal language that is able to model a real life domain into a formal draft standard. By using ontology modeling in a description logic that is able to explain the concept of IDS rule that detects a DDoS attack. Evaluation of ontology models that have been created was done using the reasoning. The reasoning is used to check the consistency and validity of the model ontology that has been made. Ontology were already qualified checking with process ontology reasoning taken as valid models for modeling DDoS attack along with the IDS rule to detect it.

Keywords : *Intrusion Detection System, DDoS, formal language, ontology, description logic, reasoning.*