Abstract

In the process of making a system or application, an assurance case is needed which functions as a guarantee or justification mechanism for the system to be made. Several assurance case frameworks that are commonly used in assurance case modeling are Goal Structuring Notation (GSN), Claim-Arguments-Evidence (CAE), and Structured Assurance Case Metamodel (SACM), which are relatively new to be introduced. All of these languages have the same goal, namely the representation of an assurance case that can be used to analyze that the aplikasi **or system created is in accordance with the objectives and context of its implementation. The diversity and development of modeling languages brings several changes, one of which is the difference in the features or elements that each language has for modeling assurance cases. However, due to the diversity of languages, problems arise that affect** aplikasi **developers, namely communication problems and differences in understanding between people who only understand one language but do not understand other languages. In addition to hindering the development of** aplikasi **development, it also takes time to translate the model so that both parties understand the purpose of the assurance case model created. Because there are still difficulties in transforming the assurance case model between different languages, this study aims to analyze and implement the metamodel element mapping technique to support the model transformation process from various assurance case modeling languages.**

Keywords: Assurance Case, Metamodel, Transformasi, Goal Structuring Notation, Claim-Arguments-Evidence, Structured Assurance Case Metamodel