System Entity Structure (SES) is a high-level ontology which was introduced for knowledge representation of decomposition, taxonomy and coupling of systems. It has its roots from the systems theory-based approaches to modeling and simulation. SES has been applied for various purposes by modeling and simulation community such as creating suites of models for global warming, modeling the elements of a scenario in a research flight simulator or for variant modeling in model-based design. Despite its diverse use cases, there still exists a lack of standardized computational representation. This hinders the shareability of SES artifacts and interoperability of SES tools. Adapting and enhancing the XML-based computational representation proposed by Zeigler and Hammond, we are proposing standardization in SES artifacts. Furthermore, we introduce an application agnostic tool suite: SES Editor and PES Editor. We exploit the traditional graphical representation in SES Editor and further propose an interactive pruning approach with PES Editor. Finally, we will explain the proposed standardization, the SES Editor and the PES Editor with example application use cases.

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