Description of Protocol Rules

Andreas Speck, Sören Witt, Sven Feja

[aspe|swi|svfe]@informatik.uni-kiel.de

Abstract: Protocols are formal models which may be used to define the interactions within processes. Moreover, protocols may be the base of process improvement e.g. by applying game theory.

In the paper we focus on models of interactions between system components (which we name *versions*) and the possibilities to verify that the version systems fulfill the rules (specifications) of the protocols. First, we consider the static relationships between the versions as base. Second, we discuss the dynamic interactions between these versions and present a model checking-based approach to verify the interaction specifications of the protocols.

Such verified interaction sequences (or processes) are a starting point of optimizations by game theory approaches.