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Abstract

We present a framework for property testing where a partially ordered execution trace of a distributed system is modeled by a collection of communicating automata. We prove that the model exactly characterizes the causality relation between the events in the observed trace. We present the implementation of this approach in SDL, where ObjectGEODE is used to verify properties, and illustrate the approach with an industrial case study.

Keywords : monitoring, passive testing, distributed traces, property checking, SDL.