

A FORMAL MODEL FOR COMPONENTS

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Abstract. Component-based programming advantages have established it as an important paradigm. Developing large programs requires models in order to describe the system behaviour, offering a better understanding from analysis and design to programming and a tool for type specification. We propose a model to describe the behaviour of the components in a system and the relations between components. The system is specified as a finite automaton, where the states are the components and the transitions are the relations between components. Another important feature of the model is the fact that it provides two descriptions: an external (first level) and an internal (second level) point of view.

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Keywords: