

## ***Abstract***

A Workflow is an automation of a business process. In general, it consists of processes and activities, which are represented by well-defined tasks. In this work, a formal framework based on finite state automata that facilitate modeling of workflows is presented. The workflow and its specifications are modeled separately as finite state automata models and the tool helps in its isomorphic transformation to state based C code as this has emerged as an important programming paradigm for the development of real time systems.

The *Business Process Execution Language for Web Services* (BPEL) has emerged as a standard for specifying and executing processes. It is used for composition of orchestrated Web services into business processes which helps in the realization of Service Oriented Architecture (SOA). Thus we have proposed a tool which transforms the FSM representation of the workflow into a BPEL process code.