Application to Convert Petri Net into BPMN and BPEL for Bridging the Implementation and Design Analysis Process in ERP

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ABSTRACTION

Researches related on Process Aware Information System (PAIS) are being widely developed. Workflow Management (WFM) is one example of the PAIS. The analysis of a business process uses conceptual process models such as Petri Net. While designing a business process, we use a business process model that has a relatively higher level such as BPMN models because it does not only involving the developers but also the clients. In the implementation process, the processes can be implemented by using a Service Oriented Architecture (SOA). By using SOA, the processes are represented as continuous services and this method emerges Web Services Business Process Execution Language (WS-BPEL) or abbreviated BPEL as an implementation standard. Those three process scopes run separately which led the analysis of a business process are often abandoned or the analyzed processes will never be implemented. This problem underlies the existence of a system that able to bridge those processes. Therefore we need a solution to transform those analyzed processes to be able to be implemented.

Keywords: BPEL, BPMN, business model transformation, PNML, web service orchestration.