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## **Studienarbeit**

### **“Wait Activity for SWoM”**

Web Services based on the service-oriented architecture framework serve as the foundation for modern distributed, heterogeneous applications. They are perfectly suited as the function layer of the two-level programming model that is characteristic for workflow-based applications.

Workflow-based applications are composed of two distinct pieces: a process model that describes the sequence in which the different activities making up the process model are being carried (programming in the large) and the individual components that implement the various activities (programming in the small). In the Web services environment, process models are described using the Web Services Business Process Execution Language (WS-BPEL).

The purpose of a workflow management system (WFMS) implementing the WS-BPEL specification is to manage the life cycle of business processes, to navigate through the associated process models, and to invoke the appropriate Web services. The Stuttgarter Workflowmaschine (SWoM) partially implements the appropriate WS-BPEL standard.

A particular important activity for carrying out performance tests is the wait activity.

The purpose of this Studienarbeit is to write the wait activity. It consists of two process types: (1) the generation of appropriate requests for IBM WebSphere® and (2) the processing of the completion processing signaled by IBM WebSphere®. Very short wait times, which are used for performance benchmarking, should be handled inline.

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