Over the past few years, several initiatives have been created with the objective of providing support tools for modelling and description of software processes, providing functionality for creating and editing the activities flow of its various disciplines, and addressing the different elements that define a software process, such as activities, tasks, steps, artifacts, and roles. Examples of such tools currently available that provide process modeling languages, are: (i) IBM Rational Method Composer (RMC) [] - which consists of a suite of commercial tools for editing, viewing, configuration and publishing software process specifications, and (ii) the Eclipse Process Framework (EPF) [2] - open-source framework used for defining processes based on the Unified Modelling Metamodel Architecture (UMA).

Despite the benefits and advantages brought by the process modeling, several recent studies have underscored the importance of providing mechanisms and tools that provide support for the execution of software processes, to enable the tracking and monitoring of their activities.

According to process models such as CMMI and MPS.BR,

Although Increasingly, companies software development has previously confirmed that in addition to defining a software process, it is extremely important to monitor their software development projects to achieve improvements in its processes, improving therefore its productivity and quality of their products.

The increasing complexity of software is requiring, increasingly, the use of software development processes well defined and the tracking and monitoring of their activities. Moreover, the software development companies are increasingly competitive and have great interest in improving their productivity.

The first step in improving the productivity of a software development process is performing the measurement.

In contrast, the area of process management business has been consolidated over recent years, proposing various languages and tools that support process execution. Over recent years the area has also been growing and matures through interaction with the software industry. The process execution language *Business Process Execution Language* (BPEL) is one of the outcomes generated by that community as a result of such interaction.

Despite advances in both areas modelling and execution of process, little effort has been made in integrating them, and support to assist in the software processes definition and execution, directly benefiting its effective monitoring, providing resources for its continuous improvement. Some recent studies have promoted the integration of approaches and languages for process modelling and execution [3] [4] [5]. However, these works mainly emphasize the modelling of processes using different languages available, but do not explore in depth transformation, installation and execution of such processes in workflow systems, thus ensuring no effective process execution.

This paper presents a model-driven approach for modeling and execution of software processes in workflow systems. The approach allows: (i) the transformation model-to-model process specifications for software specifications, workflow, and (ii) processing model-to-text of workflow specifications to source code to be installed on engines workflow. As benefits, the approach promotes the monitoring of process execution, allowing their monitoring for validation, verification and simulation, as well as analysis and decisions to improve processes. The paper presents an implementation of the approach as a means of validation. The article also presents an implementation developed as a way of validating the approach. In this implementation, specification of software processes on the Eclipse Process Framework (EPF) are automatically transformed to a workflow specification language jPDL. These specifications are jPDL subsequently processed in source code form of Java Server Faces (JSF) that can be installed on the jBPM workflow engine. Engineering technologies driven by models such as Accell QVTO and were used in the development of such an implementation of the approach.

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