



Goal-Driven BPM: Handling Real-Life Business Processes

Business Process Management (BPM) is a business management approach that views business processes as the central competitive advantage for an organization. An organization's success depends on its ability to optimize and execute its business processes in a measurable and repeatable fashion. As a technology, BPM tools enable companies to define, document, optimize, automate, monitor and manage business processes as real assets.

Traditional BPM platforms define business processes as a collection of tasks that need to be performed in a well-defined sequence, which may include parallel paths and conditional branching. The popularity of this approach dates back to the familiar flowchart, and more recently the UML Activity Diagram. For all its intuitive appeal, task-driven BPM suffers from fundamental limitations as a business process model. Decomposing business processes into low-level tasks often leads to complex inter-dependencies among those tasks that prove too rigid for adaptation as typically required to model real-life processes. Moreover, to account for all possible contingencies, a task-driven process model would grow exponentially in both size and complexity. It is common to see task-driven process diagrams that literally cover several walls. Such complexity is often the main driver of implementation time and costs, making it difficult to adjust processes in real-time in response to environmental changes.

Goal-driven BPM is a new approach to business process management designed specifically to handle complex, dynamic, enterprise-level business processes, especially those with extensive human interactions. Goal-driven BPM elevates the focus of business processes from low-level tasks to high-level objectives and relies the process engine to dynamically generate the tasks required to accomplish those objectives, taking into account current business conditions, corporate policies, and regulatory requirements. As your business environment changes, the generated task list automatically updates to reflect those changes without manual intervention. The result is a highly flexible, adaptive, and dynamic process management system that can handle the uncertainties and unknowns frequently encountered in real-life business processes.

The ability to focus on high-level business objectives leads to several other benefits. By eliminating the need to define low-level tasks and their inter-dependencies, goal-driven BPM significantly compresses implementation time and reduces post-deployment maintenance costs. It also enables organizations to implement and deploy processes that are not yet completely understood, leaving process details to be filled in as experience is gained through actual usage. In many cases, certain portions of a business process may always have to remain "fuzzy" in order to retain the flexibility required to accommodate human behavior. In other words, one may not care HOW things get done as long as business objectives are met. Finally, the streamlined goal-driven process diagrams, showing only high-level business objectives, are more comprehensible to business users and better suited for performance monitoring.

Automate BPM is one of the first commercially available implementations of goal-driven BPM. Our patent-pending state engine technology decomposes business



processes into a collection of simple, self-contained business rules that continually monitor the status of specific business objectives and generate the requisite tasks to move these objectives towards completion. As business transactions occur, the state engine executes the relevant set of business rules and updates both the process status and the task list accordingly. The Automate BPM engine provides a rich set of services to support advanced process execution logic, keeping the rules simple to define and easy to adapt. As a result, business processes can be implemented extremely quickly, typically in a matter of days and at times hours. Furthermore, once the rules are in place, they can be adjusted individually to adapt to changes in the business environment without dealing with the complex inter-dependencies normally present in the task-driven approach.

Automate BPM enables a full spectrum of process enforcement capabilities. At one end of the spectrum, the state engine can enforce strict task execution sequences, essentially emulating the task-driven approach. At the other end, the state engine can operate purely in background mode, monitoring progress, notifying responsible parties, and providing guidance without imposing new constraints on the work process. The ability to operate in background mode also means that Automate BPM can process-enable existing IT systems and application unobtrusively, often requiring no modifications to existing systems and resulting in significant savings in implementation and maintenance costs.

More often than not, enterprise-level business processes have strict process enforcement requirements in certain areas while giving employees flexibility in other areas. Automate BPM can handle both scenarios with ease. Alternatively, Automate BPM can layer on top of other, task-based BPM platforms and serve as a top-level orchestration and/or rules engine to integrate people into processes that were previously system-centric, thus extending the reach and value of these processes. Having an attractive and highly functional user interface is an important requirement in integrating people into business processes. Automate BPM provides support for advanced form capabilities including data security policies, dynamic reconfiguration of forms based on user inputs, fine-grained control over form layout, and sophisticated form components such as multi-select lists, action buttons, and tables with selectable rows.

The Automate BPM Suite includes two components: Design Studio and Automate BPM Server. With the Design Studio, process experts can graphically lay out the process diagram, define business rules, and implement data bindings to external data sources. The end result of the design process is a process description document in XML format. This document can be uploaded to the Automate BPM Server for execution. End users access the deployed application via a standard web browser.

Automate BPM is compliant with open industry standards to ensure interoperability with existing IT infrastructures. These standards include J2EE, Java, Javascript, SQL, JMS, XML, SOAP, WSDL and others. Automate BPM runs on all major operating systems and databases and can exchange data with other systems via standard data exchange mechanisms including JDBC, Java API, message queues, and web services. With these capabilities, Automate BPM is a complete process management and integration platform designed specifically to handle complex real-life processes.