FuegoBPM Version 5.0 Technical Briefing

Fuego (www.fuego.com), a pure-play BPM vendor, recently gave *Business Integration Journal* (www.bijonline.com) and Alternative Technologies (www.alternativetech.com) an in-depth technical briefing on its Java-based BPM products. Fuego's newest offerings include:

- **Fuego Process Orchestration Studio:** Studio is an integrated environment for business process modeling, design, simulation, and test. It includes support for "mini-BAM," enabling tracking of the most useful logistics, such as identifying which steps have been completed in a process instance or where current load is greatest. Studio is a 16MB download that supports unlimited "projects" (see below) and business processes.

- **Fuego Express Process Orchestration Engine:** Express is the Fuego run-time environment for departmental-level processes as well as a self-contained process server "spoke" for those companies desiring a zero-maintenance implementation (e.g., hospitals, etc.). It supports one project, requires the use of the bundled Cloudscape Personal DBMS and Apache Tomcat, and comes in two versions depending on the number of users: support for one to 15 users or support for 16 or more users.

- **Fuego Enterprise Process Orchestration Engine:** Enterprise is the Fuego run-time environment for enterprise-level processes. It supports enterprise requirements such as BPM federation (multiple, interoperating process engines), hot and cold fail over, clustering, load balancing, BAM/OLAP capabilities, open DBMS access (for repository and operational data store), LDAP, popular J2EE Web and application servers, multiple projects, and extensibility via FDI/JAXB. No messaging layer is required, although it can leverage any messaging technology if one is already installed. There is no charge for adapters.

FuegoBPM 5.0 consists of: Process Orchestration Designer for process modeling; Component Manager, which introspects component interfaces and automatically generates reusable technology adapters; Organization Manager for LDAP-like hierarchical modeling of organizations (including personnel, roles, and groups); Work Portal for pushing work to users; Process Analyzer (includes OLAP Browser) for analyzing historical data; Simulation for logistical optimization; basic Business Activity Monitoring; an Engine Execution Console for deploying processes to engines; and one or more Runtime Environments (the Process Orchestration Engine).

Version 5.0 introduces a number of improvements, especially in the area of usability on the process design side. Many organizations have some processes modeled in other tools. Existing process models can now be imported from Visio, IDS Scheer, ProForma, ProActivity, and Sigma Flow, as well as any BPEL process definition. Additionally, process templates from Fuego or third parties can be imported to jumpstart a BPM effort.

With Version 5.0, Fuego continues to focus on the product's usability, with the stated goal of bringing BPM within reach of the business analyst, where possible. Process Orchestration Designer defines a number of user-selectable "process themes" to control the appearance of a process model, including the shapes used by Business Process

Modeling Notation (BPMN) and UML. Decision nodes with a single input path and multiple output paths are supported diagrammatically: We would like to have seen general decision node support with fan in/fan out capability and expect this to be added in a future release. Diagrams can be annotated. Event notifications can be included in the process definition, with built-in notification via e-mail, pager, PDA, or system tray.

New constructs for simplifying process design have been introduced: Procedures and Screenflows. Procedures are a way for business analysts to graphically design and group one or more automated process steps without the need to write process flow logic. Fuego treats Procedures as distinct from its Subprocesses, which support the notion of both automated and manual activities within multiple roles. Procedures may be atomic if desired. For example, BPEL (since it currently supports only automated tasks) is an example of a procedure within Fuego. Similarly, Screenflows are a collection of activities involving only human interactions (no automated steps) for single roles, participants, and projects. Additionally, compensation transitions permit the modeling of undo steps that are automatically executed in reverse order whenever a process failure occurs. Likewise, exception transitions are used to model the steps to be performed whenever a designated exception occurs.

Business rules associated with activities can be defined, using Fuego Business Language (FBL), Java, or Visual Basic (VB), and the developer can switch between these languages, interactively. FuegoBPM can also integrate with any business rules management product, and Fuego resells the Corticon product (www.corticon.com). Activities can be grouped to specify transaction boundaries, and compensating activities can be defined. Data transformation is supported via a drag-and-drop metaphor that enables one-to-many mappings.

Process documentation is automatically generated in HTML format, and can be automatically generated into the user Help available from the Work Portal. The product now supports grouping of processes into projects, permitting impact analysis among them and the sharing of certain definitions. In addition to process versioning, FuegoBPM now supports source code control, using either CVS or Microsoft Visual SourceSafe.

New wizards have been introduced in the Component Manager to help with component introspection and data transformation. The Component Manager can introspect Web Services, Java, EJB, COM/DCOM, HTML, CORBA, JDBC/ODBC, XML, JMS and other middleware components, in order to automatically generate component interfaces. This feature is a key product differentiator that greatly reduces the time to deployment compared to the messaging layer/adapter architectures.

Fuego's approach to BAM begins by storing process performance and workload data in an operational data store in the form of multidimensional cubes. The user can select down to the specific activity or time. Analysis can be scheduled and run as of a specified point in time. As of Version 5.0, considerable alignment between metrics trees and process hierarchies is supported. In the future, Fuego plans to support user-defined BAM, monitoring both control and production data for Key Performance Indicators (KPIs), user-defined metrics, gauges, graphs, and real-time simulation.

Native simulation is new, and supports simulation driven by multiple statistical distributions as well as variable costing and animation. Simulation results can be displayed using a variety of graphics such as bar charts. Data generated from

FuegoBPM's BAM facility can be used to drive simulation, enabling a degree of closed loop control. A set of Web Services can be used to move BAM information to popular external analytical tools such as those from Business Objects or Cognos.

The Fuego Process Orchestration Engine now supports BPEL4WS, which is generated by the Process Orchestration Designer. BPEL can be translated to XPDL. Federated support includes participation of foreign process engines that use either XPDL- or BPEL-compliant models.

System administration is Web-based and SNMP is now supported, enabling common network administrative tools. Fuego stated that HP OpenView certification was forthcoming.

For further information or pricing, contact Fuego directly at .800-355-7602. Fuego is located at 2400 Dallas Parkway, Suite 350, Plano, TX 75093. Website: www.fuego.com.

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