Technical Brief

Current Projects of the Workflow Management Coalition and the Business Process Management Initiative

By Mike Gilger

The Workflow Management Coalition (WfMC) and the Business Process Management Initiative (BPMI) have been working together on common standards that will facilitate the broader use of workflow tools and technologies and the use of XML business process languages. The last meeting of the joint working group of the WfMC and BPMI was held on February 12th, 2003 in San Diego, CA. During that meeting the two groups established areas of common activity, and ways that the work of each group could be focused towards a common goal. Note, in this technical brief, the terms workflow and Business Process Management (BPM) are used interchangeably.

Currently, there are three main activities.

Activity One

The BPMI group is working to map the complete WfMC workflow reference model within BPML (the Business Process Modeling Language from BPMI.org). The WfMC Reference Model defines the relation between process definition, process execution, interoperability of processes on different execution engines, logging and control, and interfaces to and from other executing processes. See www wfmc.org/standards/model2.htm for more information on the workflow reference model.

As part of this same effort, the WfMC XPDL (XML based Process Definition Language) will be mapped. The BPML activity construct (Business Process Modeling Language from BPMI.org), XPDL, provides a model for representing executable enterprise business processes, which includes a well-defined task description that defines data schema, properties, and interfaces. XPDL is very focused on defining specific aspects related to the distribution of work including methods to declare participants or resources required to perform an activity, whereas BPML is more generalized to defining activities associated with web services and computing processes. Therefore, the desire is to create BPML templates to extend the reach of BPML to the long running and resource constrained tasks that have traditionally been the focus of workflow products, and allow for workflow task definitions similar to those that XPDL currently provides.

For a good reference on the differences between these two XML based business-process languages (as well as BPEL), please refer to the white paper titled A Technical Comparison of XPDL, BPML, and BPEL4WS by Robert Shapiro (http://www.bptrends.com/publicationfiles /Comparison of XPDL and BPML_BPEL 12-8-02111.pdf.pdf).

Activity Two

BPMI is also working on a generic business process-modeling notation, the Business Process Mapping Notation (BPMN). Members from both WfMC and BPMI are working on mapping BPMN
to XPDL. The obvious goal is that a single notation language could be used for both XPDL and BPML.

BPMI hopes that their notation will also be used by those doing development in BPEL and plans to submit a proposal to the OMG’s Business Process Metamodel RFP this summer in hopes that the notation can also become an OMG standard.

**Activity Three**

Finally, the WfMC is working on the second generation of the Wf-XML interoperability standard. Version 1.0 of the standard is available at [http://www.wfmc.org/standards/docs.htm](http://www.wfmc.org/standards/docs.htm). The drafts of version 2 are available to members only. Wf-XML provides a message-based interface using XML in which a business process can start other business processes, query the processes about their state, and control process interactions such as suspend, cancel, etc.

The guidelines for this effort are as follows:

- Develop a standard protocol for run-time interoperability between business process management systems that conform to existing SOAP and WSDL standards, while simultaneously using the same semantics as Wf-XML.
- This protocol should be coordinated with the Web Services Choreography Interface (WSCI), possibly to provide a WSCI binding of Wf-XML for Interoperability.

WSCI is a BPMI project that describes the behavior of Web Service interfaces. WSCI is designed to provide process flow choreography (workflow). Incorporating many aspects of BPML, WSCI features sequencing rules, correlation, exception handling, and transaction rules associated with Web Service choreography.

Of particular note is an extension for Wf-XML that includes a Web-Forms services construct, where Wf-XML becomes a simple standard protocol that enables a workflow system to integrate activities at the presentation level. This will significantly extend the reach of Wf-XML specification into the area of web-based interaction. Members from SAP and Fujitsu are working on the details of this.

The standards stack, shown in Figure 1 on the next page, illustrates how the joint working group of WfMC and BPMI see the standards “fitting“ together. The highlights show where the various tasks are being performed. Note that this graphic is a work in progress, and subject to change as the joint work moves forward.
Conclusion

Both the WfMC and BPMI develop and promote process automation through the establishment of standards. By enabling interoperability between heterogeneous process-automation products, these standards help reduce the risks involved in their usage. The joint work will lead to less confusion in the marketplace, a reduction in the number of standards, and a clarification in perceived standards overlap. This should result in faster and wider industry acceptance of these standards resulting in benefits to both vendors and users of process automation technologies.

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Mike Gilger is the CTO of Identitech, Inc. and the Chair of the joint working group of the WfMC and BPMI organizations. Mr. Gilger can be reached at mike.gilger@identitech.com