

The release by BEA, IBM, and Microsoft of BPEL4WS, a new language for the modeling of executable business processes, adds another candidate specification to the emerging standard BPM stack. The future directions announced for BPEL4WS follow the footsteps of BPML identifying possible paths of convergence for the BPM industry.

Prior to this release, the emerging BPM industry has been considering multiple alternative paths for the modeling of executable business processes. Microsoft pioneered the adoption of the Pi-Calculus model with XLANG, IBM rejuvenated the use of Petri Nets with WSFL, and BPMI.org unified the two approaches with BPML 1.0. Alongside such parallel efforts, other organizations advocated radically different approaches for business process modeling, such as ebXML BPSS developed by OASIS.

With the release of BPEL4WS, BEA, IBM, and Microsoft have adopted a model that is significantly similar to the one promoted by BPMI.org with BPML 1.0, therefore opening the door to a convergence of standards in the BPM industry around a common model shared by leading organizations. BPMI.org welcomes this new release with great enthusiasm and is working on identifying possible paths of convergence that will offer customers a unified stack for BPM.

BPML and BPEL4WS share similar roots in Web Services (SOAP, WSDL, UDDI), take advantage of the same XML technologies (XPath, XSDL), and are designed to leverage other specifications (WS-Security, WS-Transactions). Beyond these areas of commonality, BPML supports the modeling of real-world business processes through its unique support for advanced semantics such as nested processes and complex compensated transactions, capabilities BPEL4WS has yet to address. The authors of the BPEL4WS specification acknowledge such limitations in Section 13 of their recent draft, thus identifying a clear path of convergence toward a model similar to BPML's.

Now that the BPM industry has started to consolidate on a common vision for Business Process Management, BPMI.org's original mission is more critical than ever.

The Initiative's mission is to promote and develop the use of Business Process Management (BPM) through the establishment of standards for process design, deployment, execution, control, and optimization. In that respect, BPMI.org is not only interested in the execution side of business processes—currently covered by specifications such as BPML and BPEL4WS—but also their design by business analysts through the development of the Business Process Modeling Notation (BPMN), as well as their deployment, control, and optimization, through the development of the Business Process Query Language (BPQL). With such developments, BPMI.org remains the first and only independent organization fully dedicated to the development of a royalty-free BPM stack.

BPMI.org acknowledged early on the possibility that multiple standards might coexist before any real consolidation takes place in the industry. This fact strongly motivated BPMI.org's participation in the development of the Web Service Choreography Interface (WSCI), which was approved as a note by the W3C on August 8, 2002*. WSCI, best described as a process interface definition language for business processes, is the largest common denominator to BPML and BPEL4WS. By offering "out-of-the-box" interoperability across these two languages as well as ebXML BPSS and WfMC's XPD, WSCI has greatly contributed to the consolidation of a standard BPM stack.

Some Facts about BPML & BPEL4WS

- BPML and related specifications within BPMI.org's standard BPM stack are provided as royalty free.
- BPML is a strict superset of BPEL4WS.
- BPML and BPEL4WS share an identical set of idioms and similar syntaxes as the basis for convergence.
- BPML provides a rich and mature language for expressing both simple as well as inherently complex business processes.
- BPML and BPEL4WS are both block-structured languages, with the addition of nested processes in BPML.
- BPML is based on a logical process model that can fully express concurrent, repeating, and dynamic tasks.
- BPML builds on the foundation of WSCI for expressing public interfaces and choreographies.

* WSCI was submitted to the World Wide Web Consortium (W3C) by BEA Systems, BPMI.org, Commerce One, Fujitsu Limited, Intalio, IONA, Oracle Corporation, SAP AG, SeeBeyond Technology Corporation and Sun Microsystems.