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Preface

The International Symposium on Rule Interchange and Applications (RuleML-2007), collocated in Orlando, Florida, with the Tenth International Business Rules Forum, was the first symposium devoted to work on practical distributed rule technologies and rule-based applications which need language standards for rules operating in the context of modern infrastructures, including the Semantic Web, intelligent multi-agent systems, event-driven architectures, and service-oriented computing applications. The symposium was organized by the RuleML Initiative, financially and technically supported by industrial companies (Top Logic, VISTology, and Inferware) and in cooperation with professional societies (ECCAI, AAI, ACM, ACM SIGAPP, ACM SIGMIS, ACM SIGART, ACM SIGMOD, IEEE, IEEE Computer TCAAS, IEEE SMCS, BPM-Forum, W3C, OMG, and OASIS).

The RuleML Initiative is organized by representatives from academia, industry and government for the advancement of rule technology, providing enhanced usability, scalability and performance. The goal of RuleML (www.ruleml.org) is to develop an open, general, XML-based family of rule languages as intermediaries between various ‘specialized’ rule vendors, applications, industrial and academic research groups, as well as standardization efforts such as OMG’s PRR or W3C’s RIF. A general advantage of using declarative rules is that they can be easily represented in a machine-readable and platform-independent manner, often governed by an XML schema. This fits well into today’s distributed, heterogeneous Web-based system environments. Rules represented in standardized Web formats can be discovered, interchanged and invoked at runtime within and across Web systems, and can be interpreted and executed on any platform.

After a series of successful RuleML workshops and then conferences (e.g., <http://2006.ruleml.org>), the RuleML 2007 Symposium was a new kind of event where the Web Logic community joined the established, practically oriented Forum of the Business Rules community (www.businessrulesforum.com) to help the cross-fertilization between Web and business logic technology. The goal of RuleML 2007 was to bring together rule system providers, representatives of, and participants in, rule standardization efforts (e.g., RuleML, RIF, SBVR, etc.) and open source rule communities (e.g., jBoss Rules, Jess, Prova, OO jDREW, etc.), practitioners and technical experts, developers, users, and researchers, to attend an exciting venue and exchange new ideas, practical developments and experiences on issues related to the engineering, management, integration, interoperation, and interchange of rules in open distributed environments such as the Web.

In spite of this year’s late announcement, RuleML 2007 received 41 original submissions from contributors around the world. The organizers of this event could take advantage of the very strong International Program Committee, who rigorously reviewed the submissions. Each submission was reviewed at least by three Program Committee members. Finally, the symposium program included: nine full papers, which presented solid work in advancing and assessing the state of the art in rule-based systems, including event processing systems; two invited papers accompanying

keynotes; nine short papers, which presented innovative ideas, approaches, and implementations; and three demo papers accompanying presentations of practical applications at the RuleML 2007 Challenge session. Full papers represented two main streams: (1) Rule languages, rule engines, and rule interchange. (2) Business process and service modeling and management. Short papers covered several aspects including advances in rule languages, rule engines, integration of rules and ontologies, as well as rule applications.

To place emphasis on the practical use of rule technologies in distributed Web-based environments, there was a RuleML 2007 Challenge with a focus on rule engines and rule technologies, interoperation, and interchange. The challenge offered participants the opportunity to demonstrate their commercial and open source tools, use cases, and applications.

Further highlights of RuleML 2007 included:

- Plenary keynotes given by world-class practitioners and researchers, featuring foundational topics of rule-based computing and industrial success stories:
- 1. Ron Ross (BRCommunity):
 “Business Requirements for Rule Modeling”
- 2. Jürgen Angele (Ontoprise):
 “How Ontologies and Rules Help to Advance Automobile Development”
- 3. Adrian Bowles (OMG):
 “Sharing Policy Rules for IT Governance”
- 4. Harold Boley (NRC IIT):
 “Are Your Rules Online? Four Web Rule Essentials”
- A panel discussion on Web business rules, featuring prominent and visionary panelists.
- Social events to promote networking among the symposium delegates.

The RuleML 2007 organizers wish to thank the excellent Program Committee for their hard work in reviewing the submitted papers. Their criticism and very useful comments and suggestions were instrumental in achieving a high-quality publication. We also thank the symposium authors for submitting good papers, responding to the reviewers’ comments, and abiding by our production schedule. We further wish to thank the keynote speakers for contributing their interesting talks. We are very grateful to the Business Rules Forum organizers for enabling this fruitful collocation of the Tenth Business Rules Forum and RuleML 2007. In particular, we thank Gladys Lam and Valentina Tang for their support. Finally, we thank our sponsors, whose financial support helped us to offer this event, and whose technical support allowed us to attract many high-quality submissions.

August 2007

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