

Conference Program



RuleML-2007 International RuleML Symposium on Rule Interchange and Applications

Orlando, Florida
October, 25-26, 2007



Co-located with
10th Business Rules Forum

Sponsored by
NASA Ames Research Center, Top Logic, Vistology,
Inferware

Supported by
W3C, OMG, OASIS, ECCAI, AAI, IEEE, IEEE Computer
TCAAS, IEEE SMCS, ACM, ACM SIGAPP, ACM SIGMIS,
ACM SIGART, ACM SIGMOD, BPM-Forum, Springer

Table of Contents

Table of Contents.....	2
Disclaimer	2
Additional Help & Information	2
Welcome to RULEML-2007	1
Symposium Officers and Program Committee Members.....	2
The RuleML Initiative.....	4
General Symposium Information.....	5
Information for Chairing Sessions	5
Information For Presenters	6
Symposium Timetable.....	7
Symposium Program.....	9
Keynote Speakers	13
Events Associated With RULEML-2007	17
Information For Your Visit to Orlando.....	17

Disclaimer

As organizers of RuleML-2007 we are making every effort to make it an enlightening and enjoyable experience for participants. However, we can not take responsibility for any damage, loss or inconvenience participants might incur in connection with the symposium. In addition, the organizers can not be held responsible for the correctness or appropriateness of the talks, papers, panels, tutorials and demonstrations included in the symposium. In particular, changes to the published symposium program or cancellation of parts thereof do not entitle participants to a full or partial refund of the symposium fee.

Any personal/business information supplied to the symposium will be used by the symposium organization for the purposes of symposium registration and administration. Names and addresses of attendees will be processed electronically and included in a list of participants that may be posted and/or distributed during and in connection with the symposium. In addition, this information may also be made available for purposes beneficial to the scientific community such as informing attendees of relevant related publications, events, or items of interest to the community. By registering for the symposium, participants give their consent for such uses of their personal/business information.

Additional Help & Information

If you need help with registration, hotel, tours, etc. and when the symposium registration desk is closed, please contact the RuleML-2007 organizers.

E-mail: ruleML2007@easychair.org

Welcome to RULEML-2007

Welcome to the International Symposium on Rule Interchange and Applications (RuleML-2007) organized by the RuleML initiative, and welcome to Orlando, Florida. We are delighted to provide the venue and facilities for what we hope will be a stimulating and successful event. RuleML-2007 is the first primary symposium devoted to work on practical distributed rule technologies and rule-based applications. The symposium theme for 2007 will be „Rule Interchange and Applications“.

After a series of successful RuleML workshops and then conferences the RuleML-2007 is a new kind of event where the Web Logic community joins the established, practically oriented Forum of the Business Rules community to help cross-fertilizing between Web and Business Logic technology. The goal of RuleML-2007 is to bring together rule system providers, representatives of, and participants in, rule standardization efforts and open source rules communities, practitioners and technical experts, developers, users, and researchers, who attended an exciting venue to 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.

This year from 41 submitted papers 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 the 10 demo presentations of practical applications at the RuleML-2007 Challenge session were selected for the final program. The symposium opens on 25th October with its regular program and closes on the evening of 26th October. In several keynote talks renowned speakers give presentations about „up-to-date“ topics that pose challenges to industry, technology development and research:

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“

The program also includes a panel discussion on „Web Business Rules“ featuring prominent and visionary speakers” and a Challenge with prestigious prizes. An excellent technical program is a prerequisite for interaction and communication, but it does not suffice unless accompanied by ample opportunities for social encounter such as the breakfasts, the lunches, and social events to promote networking among the symposium delegates in an informal setting. In addition there will be a general open RuleML meeting on Thursday evening and a closing session on Friday evening which will provide an excellent chance for exchanges of ideas on specific topics and planning of future collaborations.

Over the next few days, we hope that everyone participating in the symposium will expand their knowledge and will find useful resources to help with their ongoing work. Most importantly, we hope that by the end of the symposium everyone will have found new friends and partners with whom to work towards new research achievements.

Said Tabet
General Chair



Adrian Paschke
Program Co-Chair



Yevgen Biletskiy
Program Co-Chair

Symposium Officers and Program Committee Members

General Chair
Said Tabet, Inferware Corp., USA
stabet@ruleml.org

Program Co-Chairs
Adrian Paschke, Technical University Munich, Germany
paschke@in.tum.de
Yevgen Biletskiy, University of New Brunswick, Canada
biletski@unb.ca

Challenge Co-Chairs
Alexander Kozlenkov, Betfair Ltd., London, UK
alex.kozlenkov@betfair.com
Ralph Hodgson, TopQuadrant, Inc., Mountain View, USA
rhodgson@topquadrant.com

Panel Chair
John Hall, Model Systems, UK
john.hall@modelsys.com

Publicity Chair
Suzette Stoutenburg, MITRE Corporation, USA
suzette@mitre.org

Program Committee Members:

- Asaf Adi, IBM Research Laboratory Haifa, Israel
- Bill Andersen, Ontology Works, USA
- Grigoris Antoniou, University of Crete, Greece
- Arun Ayachitula, IBM TJ Watson Research Center, USA
- Youcef Baghdadi, Sultan Qaboos University, Oman
- Sidney Bailin, Knowledge Evolution, USA
- Claudio Bartolini, HP Labs Palo Alto, USA
- Tim Bass, SilkRoad Inc., USA
- Nick Bassiliades, Aristotle University of Thessaloniki, Greece
- Bernhard Bauer, University of Augsburg, Germany
- Leopoldo Bertossi, Carleton University, Canada
- Anthony Brown, University of New Brunswick, Canada
- Loreto Bravo, University of Edinburgh, UK
- Diego Calvanese, Free University of Bozen-Bolzano, Italy
- Donald Chapin, Business Semantics Ltd, UK
- Keith Clark, Imperial College, UK
- Jorge Cuellar, Siemens AG, Germany
- Mike Dean, BBN Technologies, USA
- Stan Devitt, Agfa Healthcare, Canada
- Jens Dietrich, Massey University, New Zealand
- Juergen Dix, Technische Universität Clausthal, Germany
- Scharam Dustdar, Vienna University of Technology, Austria
- Andreas Eberhart, HP, Germany
- Maarten van Emden, University of Victoria, Canada
- Opher Etzion, IBM Research Laboratory Haifa, Israel
- Dieter Fensel, DERI Innsbruck, Austria
- Tim Finin, University of Maryland Baltimore County, USA
- Dragan Gasevic, Athabasca University, Canada
- Allen Ginsberg, MITRE, USA

- Robert Golan, DBmind Technologies, USA
- Christine Golbreich, Univ. of Versailles Saint-Quentin, France
- Guido Governatori, University of Queensland, Australia
- Sung Ho Ha, Kyungpook National University, South Korea
- Gary Hallmark, Oracle, USA
- Marek Hatala, Simon Fraser University, Canada
- Ivan Herman, W3C Semantic Web Activity, Netherlands
- Jochen Hiller, Top Logic, Germany
- David Hirtle, University of Waterloo, Canada
- Christian Huemer, Vienna University of Technology, Austria
- Jane Hunter, University of Queensland, Australia
- Elisa Kendall, Sandpiper Software, USA
- Matthias Klusch, DFKI GmbH, Saarbrücken, Germany
- Holger Lausen, DERI Innsbruck, Austria
- John Lee, Hong Kong Polytechnic University, Hong Kong
- Heiko Ludwig, IBM TJ Watson Research Center, USA
- Thomas Lukasiewicz, University Roma La Sapienza, Italy
- Christopher Matheus, Vistology, Inc., USA
- Mala Mehrota, Pragati Research, USA
- Jing Mei, IBM China Research Lab, China
- Zoran Milosevic, Deontik, Australia
- Jang Minsu, E&T Research Institute, Korea
- Leora Morgenstern, Stanford University, USA
- Joerg Mueller, TU Clausthal, Germany
- Chieko Nakabasami, Toyo University, Japan
- Matthias Nickles, Technical University Munich, Germany
- Ilkka Niemelae, Helsinki University of Technology, Finland
- Bart Orriens, Tilburg University, Netherlands
- Paula-Lavinia Patranjan, Rewerse, Germany
- Cheyne Patterson, USChurch, USA
- Axel Polleres, DERI Galway, Ireland
- Jeff Pollock, Oracle, USA
- Alun Preece, University of Aberdeen, UK
- Maher Rahmouni, HP Labs, UK
- Girish R Ranganathan, University of New Brunswick, Canada
- Dave Reynolds, HP, England
- Norman Sadeh, Carnegie Mellon University, USA
- Marco Seirioe, RuleCore, Sweden
- Kai Simon, Albert-Ludwigs University Freiburg, Germany
- Michael Sintek, DFKI, Germany
- Silvie Spreeuwenberg, LibRT, Netherlands
- Giorgos Stoilos, NTU Athens, Greece
- Terrance Swift, XSB, Inc., USA
- Kuldar Taveter, University of Melbourne, Australia
- Vagan Terziyan, University of Jyväskylä, Finland
- Paul Vincent, TIBCO Software, Inc., USA
- Kewen Wang, Griffith University, Australia
- Guizhen Yang, SRI, USA

The RuleML Initiative

The RuleML initiative is organised by representatives from academia, industry and government for promotion of the modern and future generations of rule technology, which provides enhanced usability, scalability and performance. The goal of RuleML (www.ruleml.org) is to be a general and open intermediary between various “specialized” rule vendors, applications, industrial and research working groups and standardization efforts such as OMG PRR or W3C RIF. A general advantage of using declarative rules is that they are usually represented in a machine-readable and platform-independent manner, often using XML. 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.

General Symposium Information

Conference venue and registration RuleML-2007 is co-located with the Business Rules Forum and takes place in:

Buena Vista Palace
1900 Buena Vista Drive
Lake Buena Vista, FL 32830
Toll-Free: 1-866-397-6516
Tel: (407) 827-2727 Fax: (407) 827-6070
<http://www.buonavistapalace.com/>

The symposium registration will take place on October, 25th 7 am – 4 pm and on October, 26th 7-8.30 am.

Finding your way From the north end of the airport, take SR-528 (Beeline Expressway toll road) heading west. Merge onto I-4 West. From I-4, take Exit #68, then turn right onto SR-535. Turn left onto Hotel Plaza Boulevard, then right onto E. Buena Vista Drive. Hotel is on the right.

Help and Support If you need help or additional information during the symposium please contact one of the RuleML organizers

Bank, exchange and credit cards Facilities for cashing traveller's cheques are available at banks and at most hotels. Throughout the city there are numerous ATMs available. Most credit cards are accepted in USA.

Phone country code for USA is ++1.

Electricity The voltage/frequency in USA is AC 110 volts / 60 Hz with a plug of two pins set parallel to each other. Non US participants need a plug adapter for electrical appliances.

Time Orlando is located in the Eastern Time Zone. In summer the Summer Daylight-Saving Time is in effect: *EDT UTC/GMT -4 hours*

Information for Chairing Sessions

Introduce yourself to your presenters and remind them to give you their short biography. Before the first speaker is scheduled to begin, introduce the session, introduce yourself and any co-chairs or assistants, make any announcements, and state the session rules. These are generally: (1) Every talk is allotted a total of 30 minutes (15 minutes for short papers), typically 25 minutes of presentation and 5 minutes for questions. (2) Every talk needs to end on time. (3) The chair will signal the speaker when 6 minutes are left (= 1 minute of speaking time) and 1 minute is left of the 30 minute slot

Introduce the papers and maintain the schedule times listed in the program.

Introduce your presenters using the biography they have given you.

In general, please allow the audience to ask questions first before you do. Have a look at the papers in your session and prepare for the discussion.

Information For Presenters

Presentation time is:

- full paper 30 minutes (25 min. presentation + 5 min. Q&A)
- short paper 15 minutes (10 min. presentation + 5 min. Q&A)
- demo 12 minutes (7 min. demo + 5 min. Q&A)

You can present using your own laptop or bring a CD / USB "memory stick". Copy your file to the hard drive. Presentation format:

- Full/Short paper: MS Powerpoint.
- Demo: preferably a live (online) demo

Biography. Please write a short biography for the chair to use to introduce you. (We suggest 4-6 lines, preferably typed or in block letters).

Arrive at the room where your session is being held about 15 minutes before the session

Earlier during the symposium, if possible, please go to the room in which you will be presenting in order to copy your presentation files onto the symposium laptop computer. Test it to make sure it runs as expected.

Please be considerate to the other speakers: keep to the allowed time.

Symposium Timetable

October 25th, 2007 (Thursday)	
7.00 – 4.00 pm	Registration Open
7.00 – 8.00 am	Continental Breakfast
8.00 - 8.30 am	Room CLOISTER NORTH
	Opening Address: <i>Business Requirements for Rule Modeling</i> by Ron Ross (Business Rule Solutions, LLC)
8.30 - 10.00 am	Room CLOISTER NORTH
	Session: Business Rules, Rule Engines and Applications
10.00 - 10.15 am	Break
10.15 – 12.30 am	Room CLOISTER NORTH
	RuleML-2007 Challenge
12.30 - 1.45 pm	Lunch
1.45 –2.45 pm	Room CLOISTER NORTH
	Keynote: How Ontologies and Rules Help to Advance Automobile Development by Jürgen Angele (Ontoprise)
2.45 - 3.45 pm	Room CLOISTER NORTH
	Session: Rules, Reasoning, and Ontologies
4.00 - 5.30 pm	Room CLOISTER NORTH
	Panel Discussion: Web Business Rules and Events
5.40 - 6.40 pm	RuleML-2007 General Open Meeting
7.15 pm	RuleML-2007 Dinner

October 26th, 2007 (Friday)	
7.00 -8.30 am	Registration
7.00 -8.30 am	Continental Breakfast
8.30-10.00 am	Room CLOISTER NORTH
	Keynote: Sharing Policy Rules for IT Governance by Adrian Bowles (OMG)
10.00-10.15 am	Break
10.15-11.15 am	Room CLOISTER NORTH
	Session: Business Process, Policy and IT Service Management and Modeling
11.15-12.45 pm	Room CLOISTER NORTH
	Session: Rule Languages and Interchange Standards
12.45-2.00 pm	Lunch
2.00-2.30 pm	Room CLOISTER NORTH
	Best Paper Award, RuleML-2007 Challenge Award
2.30-3.15 pm	Room CLOISTER NORTH
	Session: Reaction Rules and Rule Applications
3.15-3.30 pm	Break
3.30 -4.30 pm	Room CLOISTER NORTH
	Keynote: Are Your Rules Online? Four Web Rule Essentials by Harold Boley (National Research Council Canada)
4.30-5.00 pm	Room CLOISTER NORTH
	Wrap-Up
6.00 pm	RuleML Steering Committee Meeting (closed)

Symposium Program

October 25th, 2007 (Thursday)	
7.00 – 4.00 pm	Registration Open
7.00 – 8.00 am	Continental Breakfast
8.00 - 8.30 am	Room CLOISTER NORTH
	Opening Address: Business Requirements for Rule Modeling by Ron Ross (Business Rule Solutions, LLC)
8.30 - 10.00 am	Room CLOISTER NORTH
	Session: Business Rules, Rule Engines and Applications Chair: Jan Vanthienen
	Recovering Business Rules from Legacy Source Code for System Modernization <i>Erik Putrycz, Anatol W. Kark</i>
	An Approach for Bridging the Gap Between Business Rules and the Semantic Web <i>Birgit Demuth and Hans-Bernhard Liebau</i>
	Take - A Rule Compiler for Derivation Rules <i>Jens Dietrich, Jochen Hiller, Bastian Schenke</i>
10.00 - 10.15 am	Break
10.15 – 12.30 am	Room CLOISTER NORTH
	RuleML-2007 Challenge Chair: Jochen Hiller
	Querying the Semantic Web with SWRL <i>Martin O'Connor, Samson Tu, Csongor Nyulas, Amar Das, Mark Musen</i>
	Developing News Awareness with Reactive Rules - An Application for Detecting Scoops Ahead of the Crowd <i>Marco Seiriö</i>
	Implementing the UServ Product Derby with the TAKE rule compiler <i>Jens Dietrich</i>
	GoPubMed <i>Andreas Doms</i>
	Drools <i>Marc Proctor</i>
	Implementation of Production Rules for a RIF Dialect: A MISMO Proof-of-Concept for Loan Rates <i>Tracy Bost, Phillippe Bonnard, Mark Proctor</i>
	Extracting and visualizing business rules from legacy source code <i>Erik Putrycz</i>

	The Rule Manager; a graphical business rules environment <i>Marco Ensing</i>
	The OO JDREW Engine of Rule Responder: Naf Hornlog RuleML Query Answering <i>Benjamin Larry Craig</i>
	A Wiki and SOA Endpoint for Rules in Open Vocabulary, Executable English <i>Adrian Walker</i>
	TopBraidComposer and TopBraid Live Rules and Inferencing Capabilities <i>Holger Knublauch</i>
12.30 - 1.45 pm	Lunch
1.45 – 2.45 pm	Room CLOISTER NORTH
	Keynote: How Ontologies and Rules Help to Advance Automobile Development by Jürgen Angele (Ontoprise)
2.45 - 3.45 pm	Room CLOISTER NORTH
	Session: Rules, Reasoning, and Ontologies Chair: Martin O'Conner
	Adapting the Rete-Algorithm to Evaluate F-Logic Rules <i>Florian Schmedding, Nour Sawas, and Georg Lausen</i>
	Rule Definition for Managing Ontology Development <i>David A. Ostrowski</i>
	Integrating Rules and Description Logics with Circumscription for the Semantic Web <i>Fangkai Yang and Xiaoping Chen</i>
	XML Data Compatibility From The Ground Up <i>Karthick Sankarachary</i>
3.45 - 4.00 pm	Break
4.00 - 5.30 pm	Room CLOISTER NORTH
	Panel Discussion: Web Business Rules and Events Moderator: John Hall
	Panellists: Benjamin Grosf (Vulcan) Paul Vincent (Tibco) Mark Proctor (Red Hat) Donald Chapin (Business Semantics Ltd) Juergen Angele (Ontoprise)
5.40 - 6.40 pm	RuleML-2007 General Open Meeting; Informal Gatherings / Informal Social Program
7.15 pm	RuleML-2007 Dinner

October 26th, 2007 (Friday)	
7.00 -8.30 am	Registration
7.00 -8.30 am	Continental Breakfast
8.30-10.00 am	Room CLOISTER NORTH
	Keynote: <i>Sharing Policy Rules for IT Governance</i> by Adrian Bowles (OMG)
10.00-10.15 am	Break
10.15-11.15 am	Room CLOISTER NORTH
	Session: <i>Business Process, Policy and IT Service Management and Modeling</i> Chair: Robert Golan
	KISS – Knowledge-Intensive Service Support: An approach for agile process management <i>Daniela Feldkamp, Knut Hinkelmann, and Barbara Thönssen</i>
	Specifying Process-Aware Access Control Rules in SBVR <i>Stijn Goedertier, Christophe Mues, and Jan Vanthienen</i>
	A rule-based approach to prioritization of IT work requests maximizing net benefit to the business <i>Maher Rahmouni, Claudio Bartolini, and Abdel Boulmakoul</i>
11.15-12.45 pm	Room CLOISTER NORTH
	Session: <i>Rule Languages and Interchange Standards</i> Chair: Jens Dietrich
	Towards Semantically Grounded Decision Rules Using ORM [†] <i>Yan Tang, Peter Spyns, and Robert Meersman</i>
	A Generic Module System for Web Rule Languages: Divide and Rule <i>Uwe Aßmann, Sacha Berger, Francois Bry, Tim Furche, Jakob Henriksson, and Paula-Lavinia Patranjan</i>
	Towards Ontological Commitments with the Ω-RIDL Markup Language <i>Damien Trog, Yan Tang, and Robert Meersman</i>
12.45-2.00 pm	Lunch
2.00-2.30 pm	Room CLOISTER NORTH
	Best Paper Award, RuleML-2007 Challenge Award
2.30-3.15 pm	Room CLOISTER NORTH
	Session: <i>Reaction Rules and Rule Applications</i> Chair: Paula Patranjan
	Exploiting E-C-A Rules for Defining and Processing Context-Aware Push Messages <i>Thomas Beer, Jörg Rasinger, Wolfram Höpken, Matthias Fuchs, Hannes Werthner</i>
	The Use of Ontologies and Rules to Assist in Academic Advising <i>Girish R Ranganathan, J Anthony Brown</i>

	Towards Knowledge Extraction from Weblogs and Rule-based Semantic Querying <i>Xi Bai, Jigui Sun, Haiyan Che, and Jin Wang</i>
	Complex Information Management Using a Framework Supported by ECA Rules in XML <i>Bing Wu, Essam Mansour and Kudakwashe Dube</i>
	AIM: An XML-Based ECA Rule Language for Supporting a Framework for Managing Complex Information <i>Essam Mansour, Kudakwashe Dube and Bing Wu</i>
3.15-3.30 pm	Break
3.30-4.30 pm	Room CLOISTER NORTH
	Keynote: <i>Are Your Rules Online? Four Web Rule Essentials</i> by Harold Boley (National Research Council Canada)
4.30-5.00 pm	Room CLOISTER NORTH
	Wrap-Up
6.00 pm	RuleML Steering Committee Meeting (closed)

Keynote Speakers

Opening Address: Business Requirements for Rule Modeling
Thursday, October 25, 2007, 8 – 8.30 am



Ron Ross

Co-Founder and Principal of Business Rule Solutions, LLC and
Executive Director of BRCommunity

About the speaker

Ronald G. Ross is a Principal of Business Rule Solutions, LLC. Mr. Ross is also Co-Founder and Executive Editor of <www.BRCommunity.com>, home of the Business Rules Journal. Mr. Ross is the author of a half-dozen professional books. His newest work, Principles of the Business Rule Approach, is published by Addison-Wesley (2003). Other recent books on business rules include Business Rule Concepts (1998) and The Business Rule Book (Second Edition, 1997). He is the Co-Chair of the annual Business Rules Forum Conference. He was a charter member of the Business Rules Group in the 1980s, and was editor of its two landmark papers, "Business Motivation Model: Business Governance in a Volatile World" (2000, revised 2005) and the "Business Rules Manifesto" (2003). He is also active in the OMG Business Rules SIG and related standards development. Mr. Ross is internationally recognized as the "father of business rules."

Keynote 2: How Ontologies and Rules Help to Advance Automobile Development
Thursday, October 25, 2007, 1:45 – 2:45 pm



Jürgen Angele

CTO Ontoprise

Abstract

Besides the reduction of time-to-market, another trend may be observed in the automotive industry: built-to-order. Built-to-order reduces the mass production of cars to a limited-lot production. Emphasis for optimization issues then moves from the production step to earlier steps like the collaboration of suppliers and manufacturer in development and delivery.

Thus, relevant knowledge has to be shared between different organizations and departments in early development processes. In the talk we describe an application in the automotive industry where ontologies have two main

purposes:

(i) representing and sharing knowledge to optimize business processes for the development of cars; in our case the testing of electronic control units and (ii) integration of live data into this process.

A system is built on top of an inference engine equipped with an ontology containing information about parts, their mutual interrelationships and their behavior.

In many cases this knowledge is described by rules. This formal representation can then be compared with a concrete real car or part of a car. This system accelerates the development of cars and their parts, and in this way also reduces time-to-market.

About the speaker

Prof. Dr. Jürgen Angele is currently CTO and shareholder of Ontoprise GmbH, a provider of semantic technologies. Ontoprise has been cofounded by him in 1999. In 1994 he became a full professor in applied computer science at the University of Applied Sciences, Braunschweig, Germany. From 1989 to 1994 he was a research and teaching assistant at the University of Karlsruhe, Institute AIFB. He did research on the execution of the knowledge acquisition and representation language KARL, which led to a Ph.D. (Dr. rer. pol.) from the University of Karlsruhe in 1993. From 1985 to 1989 he worked for the companies AEG, Konstanz, Germany, and SEMA GROUP, Ulm, Germany. He received the diploma degree in computer science in 1985 from the University of Karlsruhe. He published around 90 papers as books and journal, book, conference, and workshop contributions. Topics were about semantic web, semantic technologies, knowledge representation, and their practical applications. He is leading several research and commercial projects. He gave more than 55 courses at Berufsakademien, Fachhochschulen and Universities. Topics were about: Expert Systems, Software Engineering, World Wide Web, Database Systems, Digital Image Analysis, Computer Graphics, Mathematics. He supervised around 30 master theses and Ph.Ds.

Keynote 3: How Ontologies and Rules Help to Advance Automobile Development
Friday, October 26, 2007, 8:30 – 10:00 pm



Adrian Bowles

OMG Program Director for the Governance, Risk Management and Compliance Roundtable (GRC-RT) and Managing Director of CoSource.net

Abstract

Corporate governance makes headlines, but IT governance is critical for business growth. A new collaborative project is being launched within the GRC Roundtable <www.grcroundtable.org> to improve IT governance by developing a common set of rules for IT policy management. These rules, which will map to control and security frameworks such as COBIT and ISO17799, may come from existing projects written in any language, or they may be created by the group to meet specific requirements. Participating firms will share the development costs, risk, and benefits of integrating them into a comprehensive, general purpose set. This presentation will address the challenges and opportunities created by sharing such a rule-based IT governance infrastructure.

About the speaker

Adrian Bowles is Program Director for the Governance, Risk Management and Compliance Roundtable (GRC-RT) and Managing Director of CoSource.net. Dr. Bowles has over 25 years of experience as an entrepreneur, practitioner and academic in information technology with a focus on IT strategy and management.

Previously, he held senior research and management positions at the IT Compliance Institute, Giga Information Group, Atelier Research, New Science Associates, and Yourdon, Inc. Dr. Bowles also held development roles at IBM Corp. and GTE Laboratories, and academic appointments at New York University, Drexel University and the State University of New York at Binghamton.

Bowles earned his BA in Psychology and MS in Computer Science from SUNY Binghamton, and his Ph.D. in Computer Science from Northwestern University.

Keynote 4: Are Your Rules Online? Four Web Rule Essentials
Friday, October 26, 2007, 4 – 5 pm



Harold Boley

Leader of the Semantic Web Laboratory at NRC IIT

Abstract

Four principal Web rule issues constitute our starting points: I1) Formal knowledge representation can act as content in its own right and/or as metadata for content. I2) Knowledge on the open Web is typically inconsistent but closed 'intranet' reasoning can exploit local consistency. I3) Scalability of reasoning calls for representation layering on top of quite inexpressive languages. I4) Rule representation should stay compatible with relevant Web standards.

To address these, four corresponding essentials of Web rules have emerged: E1) Combine formal and informal knowledge in a Rule Wiki, where the formal parts can be taken as code (or as metadata) for the informal parts, and the informal parts as documentation (or as content) for the formal parts. This can be supported by tools for Controlled Natural Language: mapping a subset of, e.g., English into rules and back. E2) Represent distributed knowledge via a module construct, supporting local consistency, permitting scoped negation as failure, and reducing the search space of scoped queries. Modules are embedded into an 'Entails' element: prove whether a query is entailed by a module. E3) Develop a dual layering of assertional and terminological knowledge as well as their blends. To permit the specification of terminologies independent of assertions, the CARIN principle is adopted: a terminological predicate is not permitted in the head of a rule. E4) Differentiate the Web notion of URIs as in URLs, for access, vs. URNs, for naming. A URI can then be used: URL-like, for module import, where it is an error if dereferencing does not yield a valid knowledge document; URN-like, as an identifier, where dereferencing is not intended; or, as a name whose dereferencing can access its (partial) definition.

About the speaker

Dr. Harold Boley is leader of the Semantic Web Laboratory at NRC IIT and Adjunct Professor at the Faculty of Computer Science, University of New Brunswick, Fredericton, Canada. He developed the Relational-Functional Markup Language before starting and co-leading the Rule Markup (RuleML) Initiative. He co-designed the Semantic Web Rule Language (SWRL), which combines the W3C-recommended Web Ontology Language OWL and RuleML. He led the design of a First-Order Logic Web language (FOL RuleML) and contributed to the design of the Semantic Web Services Language (SWSL). He is co-editor of the W3C Rule Interchange Format (RIF). His focus is on Semantic Web knowledge representation combining ontologies and rules. He is currently exploring this for person/organization-centric profiles supporting FOAF-extending social networking and expert finding, as realized, e.g., with RuleML FOAF in FindXpRT and Rule Responder.

Events Associated With RULEML-2007

As a registered attendee of the International RuleML-2007 Symposium, the 10th Business Rules Forum - co-located at the Buena Vista Palace Hotel & Spa - would like to extend to you a COMPLIMENTARY admission to RulesExpo, the world's largest exposition of rule vendors and solution providers.

Your complimentary admission is valid for the RulesExpo session on Wednesday, October 24, from 5:00 pm to 6:30 pm.

Please pick up your credentials at the Business Rules Forum registration desk.

RuleML-2007 General Open Meeting (open to the public)
Thursday, October 25th at 5.40 - 6.40 pm

Symposium Dinner
Thursday, October 25th at 7.15 pm
Location: Nearby restaurant – will be announced during the symposium

RuleML Steering Committee Meeting (by invitation)
Friday, October 26th starting at 6.00 pm

Information For Your Visit to Orlando

LOCAL ATTRACTIONS Don't miss this opportunity to visit some of the local attractions including Walt Disney World®, Epcot®, Kennedy Space Center, Sea World, Universal Studios Florida, the Bob Carr Performing Arts Center and much more

DINING With hundreds of restaurants within Orlando and surrounding areas including hundreds of top notch eateries within walking distance of the Symposium — it won't take you long to quench your thirst or satisfy even the most discerning diners.

What's going on in Orlando? Check out what's happening in Orlando, FL at OrlandoInfo.com: the Official Site of the Orlando/Orange County Visitors Bureau.

Sponsoring:



(Bronze)



(Gold)



(Bronze)



(Gold)

Support:



Published by:



Co-located with:



October 21-25, 2007
BUENA VISTA PALACE
Orlando, Florida

RuleML 2007



URL: <http://2007.ruleml.org>