IEEE Technical Committee on Electronic Commerce

NEWSLETTER

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Editor: Dr. Zongwei Luo
Associate Editor: Professor Haifei Li

CONTENT

1. Task Force Promotion Report

Jen-Yao Chung and Kwei-Jay Lin, co-chairs of IEEE Task Force on E-Commerce presented the proposal requesting the upgrade of TFEC (Task Force on E-Commerce) to TCEC (Technical Committee on E-Commerce) in the TAB meeting in November 2003. The proposal was well received by the Technical Activities Board of the IEEE Computer Society. After discussion, the proposal was unanimously approved. We will be officially named the Technical Committee on E-Commerce starting from 2004. Congratulations to all members and volunteers of TCEC! Your hard work has finally been paid off.

TCEC now invites volunteers for various TC activities. Please contact Dr. Jen-Yao Chung (jychung@us.ibm.com) or Professor Kwei-Jay Lin (klin@uci.edu) for more information.

2. Past Conference Activities

2.1 IEEE Conference on E-Commerce
June 24-27 2003, Newport Beach, California, USA,
Sponsored by the IEEE Task Force on Electronic Commerce
http://tab.computer.org/tfec/cec03

2.2 ACM Conference on E-commerce
June 9-12, 2003, San Diego, CA, USA
http://cs.gmu.edu/~menasce/ec03/ecom03cfp.html

2.3 The 3rd International Conference on Electronic Commerce Engineering (ICeCE2003)
- Digital Enterprises and Nontraditional Industrialization
October 24-27, Hangzhou, China
http://www.cmee.zju.edu.cn:8080/icece2003/index.html

2.4 The International Conference on Management of e-Commerce and e-Government (ICMeCG)
Oct. 28-30, 2003, Nanchang, P. R. China

2.5 Link to other events on e-commerce:
http://www.teleactivities.net/ecommerce/events.htm

3. Keynotes from IEEE Conference on E-Commerce (CEC 2003)

June 24-27 2003, Newport Beach, California, USA,

Sponsored by the IEEE Task Force on Electronic Commerce
URL: http://tab.computer.org/tfec/cec03

3.1. Building and Managing Adaptive e-Business Solution Infrastructure
David L. Cohn
Director, e-Business Solutions & Autonomic Computing
IBM T.J. Watson Research Center
Time: 8:00-9:30, June 25, 2003 (Wed.)

Abstract:

With the advancement of information technology and business transformation, and to increase profits from its value chain, an enterprise has to be able to rapidly modify and adapt its business process and collaboration infrastructure. Business Process Integration and Management is the key to building and managing an adaptive e-business solution infrastructure.

As an enabling technology of business process integration, Web services provide a standardized means to allow heterogeneous applications to communicate with one another. The standard interface description language and communication mechanism of Web services is employed to build a modularized and adaptive e-business infrastructure that supports evolving business environments. In this talk, I will introduce a reference integration architecture and then illustrate how Web services is used for enabling business service discovery, business service invocation, solution templates, and business process composition.

In order to make an e-business solution infrastructure more stable, robust and adaptive, I will discuss new and emerging autonomic computing techniques that efficiently manage the infrastructure at both IT level and business process level. I will conclude by presenting some challenging research topics that will enable our vision of e-business on demand.

Brief Bio:

Dr. David Cohn was named Director, e-Business Solutions & Autonomic Computing in September 2002, IBM T. J. Watson Research Center, after completing a successful assignment. He was Director of the IBM Austin Research Laboratory in July 1999. Before joining IBM Research, Dr. Cohn was Director, Strategic Projects at IBM Corporate Headquarters. Prior to formally joining IBM in September of 1997, Dr. Cohn served on the Computer Science and Engineering and Electrical Engineering faculties of the University of Notre Dame for twenty-five years. He was the founding Director of Notre Dame's Distributed Computing Research Laboratory during which directed 12 Ph.D. Dissertations and 31 Masters Theses. He has also held positions on the faculty of Technion, Haifa, Israel and Southern Methodist University. Along with his academic contributions, Dr. Cohn holds two US patents, has authored or co-authored three books and over 100 technical articles.

3.2. A Collaborative Web Service Platform
Meichun Hsu
VP, Engineering
Commerce One
Time: 8:00-9:30, June 26, 2003 (Thu.)

Abstract:

To enable intra- and inter-enterprise application integration, enterprises have invested heavily in EAI (Enterprise Application Integration) and B2B (Business to Business) technologies. However the first generation B2B technologies, represented by the Marketplace platform and its associated tools and applications offered in mid to late 1990's, have left much to be desired. Recent momentum in Web Services

based on the SOAP, WSDL and UDDI specifications promises a standardized connectivity at a lower cost that would transform the business connectivity paradigm. In this talk, we will analyze the current web service specifications and technologies from the perspectives of protocol layers, service descriptions, and business service registries. We discuss the challenges and opportunities in creating a web service-based platform that enables dynamic business process integration within and across enterprise boundaries.

Brief Bio:

Mei is currently Vice President of Engineering at Commerce One Inc. She is responsible for the design and development of Commerce One's web service platform product. Prior to joining Commerce One in 2001, Mei had been at HP Labs where she led HP's research program in data mining technologies, at EDS's Management Consulting Service Division and A.T. Kearney Inc., responsible for the consulting practice in advanced business process technologies, at Digital Equipment Corporation where she served as Chief Architect for Workflow, and a Professor in Computer Science at Harvard University. Mei received her B.A. from National Taiwan University, M.S. from University of Massachusetts at Amherst, and Ph.D. from Massachusetts Institute of Technology. She has widely published in the area of database systems, transaction processing, workflow automation, business process management systems, and data mining. She received the VLDB Endowment Ten-Year Paper Award in September, 2001.

3.3. The Grid: Infrastructure, Applications, and Opportunities
Dr. Carl Kesselman
USC/Information Sciences Institute
http://www.isi.edu/~carl
Time: 8:00-9:30, June 27, 2003 (Friday)

Abstract:

Collaboration plays a significant role in many important activities: fundamental advances in science are made by international teams of tens to thousands of scientists, airplanes are designed by collaborations contractors and subcontractors, businesses interact with global networks of vendors, and customers. Yet in spite of the importance of information technology to all of these endeavors, the information technology resources that can be contributed to any of these collaborations are quite constrained. Computers, data, and other resources available to individual participants cannot be easily brought into a collaboration and applied to the work of the team.

Grids are a new technology that has been developed to address these fundamental infrastructure problems. Grids provide the means for establishing distributed collaborations and allowing resources to be contributed and shared across these collaborations. Grid infrastructure is being built and is being applied to a wide range of applications, from understanding fundamental properties of matter, to financial services. In this talk, I will introduce the basic motivations for Grids, and describe the types of applications that can be enabled by Grid technology. I will then overview some of the challenges that must be overcome in order to make Grids a reality and describe Grid infrastructure, such as the Open Grid Services Architecture, that has been designed to meet these challenges.

Brief Bio:

Dr. Kesselman is the director of the Center for Grid Technologies at the University of Southern California's Information Sciences Institute and a Research Associate Professor of Computer Science, also at USC. He is a widely recognized leader in the field of Grid computing, and along with Dr. Ian Foster, he co-leads the Globus project, which has developed the de-facto standard for Grid infrastructure. Dr. Kesselman received the British Computing Societies Lady Ada Lovelace Medal for significant co2ntributions in the advancement of information systems, a 2002 R&D100 Award, and was named one of the top 10 Innovators of 2002 by MIT Technology Review and Infoworld.

4. Call for participation

4.1. 2004 IEEE International Conference on e-Technology, e-Commerce and e-Service (EEE-04)
March 28-31, 2004, Grand Hotel, Taipei, Taiwan
http://bikmrdc.lm.fju.edu.tw/eee04/
Sponsored by IEEE Computer Society, Technical Committee on Electronic Commerce

EEE'04 aims to bring together researchers and developers from diverse areas of computing, developers and practitioners to explore and address the challenging research issues on e-technology in order to develop a common research agenda and vision for e-commerce and e-business. The main focus of the conference is on the enabling technologies to facilitate next generation, intelligent e-Business, e-Commerce and e-Government. The conference offers 4 keynote speakers, tutorials, poster competition, and technical paper presentation. For more details on the program please contact eee-04@enjoy-seminar.com.tw

4.2. IEEE Conference on E-Commerce (CEC'04)
July 6-9, 2004, Westin Hotel, San Diego, California, USA
http://tab.computer.org/tfec/cec04
Sponsored by IEEE Computer Society, Technical Committee on Electronic Commerce
California Institute for Telecommunications and Information Technology

IEEE CEC'04 is the 6th annual event (formerly WECWIS) and the primary forum for the exchange of information regarding advancements in the state of the art and practice of e-commerce technology and Web-based information systems. CEC'04 will consist of tutorials, invited talks, paper presentations, panel discussions and workshops. Submissions of high quality papers describing mature results or innovative work are invited.

Topics for submission include but are not limited to:

- E-Business process integration and management
- Business intelligence, decision support and data mining in e-commerce
- E-Commerce architecture and enabling technologies
- E-procurement and auction systems
- Grid services and service-oriented software design
- Intelligent e-commerce system & agents
- Multimedia web services & applications
- P2P & its application on e-commerce
- QoS e-commerce support & monitoring
- Real-time Internet technologies and scheduling protocols
- Security & trust issues in e-commerce
- Transaction & workflow management
- Web services & middleware

5. IEEE TCEC membership

Please contact Dr. Jen-Yao Chung (jychung@us.ibm.com) or Professor Kwei-Jay Lin (klin@uci.edu) for more information. You can also register online at: http://tab.computer.org/tfec/members.html